a W. R. C. Smith publication

FIFTY CENTS

Textile Industries

Formerly "COTTON"

MAY 1960

WHAT YOU'LL SEE IN ATLANTIC CITY

36-page word-picture preview of the 1960 American Textile Machinery Exhibition

pages 143—178

Planning to modernize?

page 179

Finisher's own finish

page 182

Clothing woolen cards

page 186

How to make Saaba

page 192

Choose right drafts for medium staple cotton

page 209

Textile Engineering
BLEACHING & FINISHING

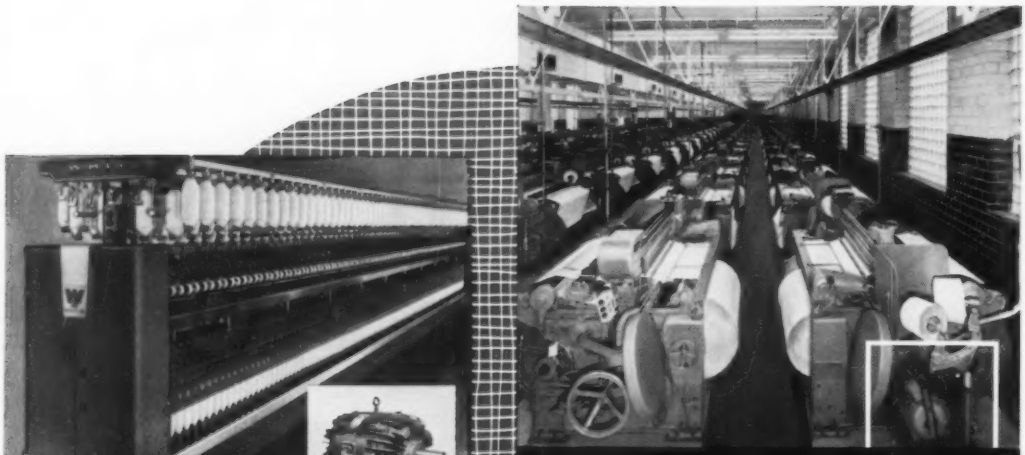
Continuous processing in all phases of textile finishing has already proved its ability to cut production costs, increase production and overall profit.

Many leaders in the bleaching and finishing field have already tooled up to engage in this faster, more profitable form of production. On hand, to blueprint the modernization, the production layout, and the new buildings that house many of the nation's most modern operations, have been the skilled planners in the Textile Engineering Division of Robert and Company Associates.

An engineering survey of your existing operations will enable you to better judge your expansion and profit potential, as our more than 40 years experience in all phases of textile engineering has helped others.

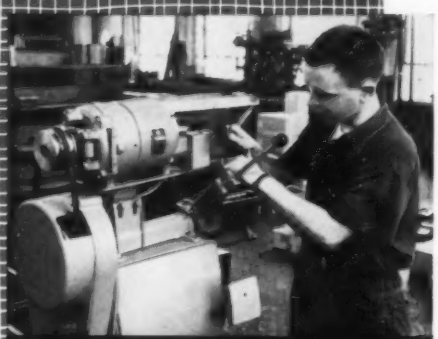
ROBERT AND COMPANY ASSOCIATES
Textile Engineering Division
ATLANTA

University Microfilms
313 No First St
Ann Arbor Mich
4



WHITIN "Piedmont" Spinning Frame driven by DIEHL motors.

Shuttleless Loom with DIEHL Power Transmitter drives.



FOSTER Winder operated by DIEHL Power Transmitters.

DIEHL* QUALITY AND PROGRESS

Pioneering in automatic drives and electronic controls for the Textile Industry

NOTE THESE IMPORTANT DEVELOPMENTS:

- DIEHL originated the Power Transmitter now successfully operating DRAPER CORPORATION Looms throughout the Textile Industry.
- DIEHL Power Transmitters drive the spectacular new DRAPER Shuttleless Loom.
- DIEHL developed the motor for WHITIN MACHINE WORKS new "Piedmont" advance designed Spinning Frame.
- DIEHL developed the Power Transmitter and electronic control for WHITIN's new Roving Frame.
- DIEHL developed the Power Transmitter for FOSTER MACHINE COMPANY Winder.
- DIEHL is pioneering in the application of advance electronic engineering principles to textile machinery.

These are but a few diversified examples of the progress which DIEHL has made . . . and will continue to make . . . in developing and producing highest quality electric drives and automatic controls for the Textile Industry.

SEE LATEST DEVELOPMENTS AT OUR EXHIBIT

AMERICAN TEXTILE MACHINERY EXHIBITION

Atlantic City, N. J.
Booths 289, 290 & 291.
May 23 - 27, 1960

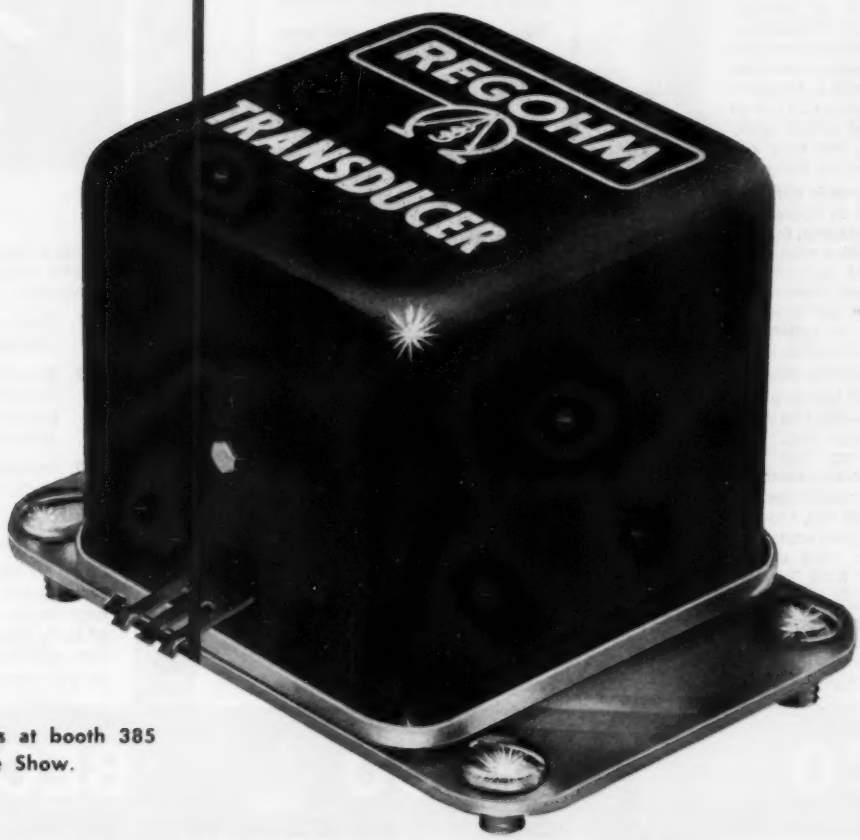
*A Trademark of DIEHL MANUFACTURING COMPANY

DIEHL MANUFACTURING COMPANY
A Subsidiary of THE SINGER MANUFACTURING COMPANY
Finderne Plant, SOMERVILLE, NEW JERSEY
Chamblee (Atlanta) • Charlotte • Chicago • Needham Heights (Boston) • New York • Philadelphia

2430

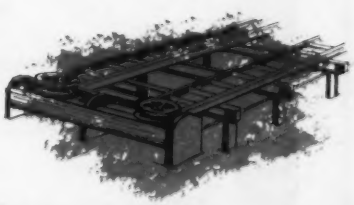
CONTROL SIMPLIFIED

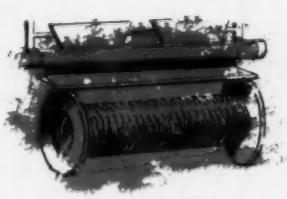
conversion of
low level
mechanical motion
into
electrical action



See us at booth 385
Textile Show.

TENSION · SPEED · LIQUID LEVEL · EDGE CONTROL · LOOP LENGTH





ELECTRIC REGULATOR CORP. NORWALK, CONN.

Which of these 3 products and services can you use from BECCO?

"Enclosing $1.00 — Send Patent License"

Well, perhaps there's a little more to your gaining use of Becco patents than just mailing your dollar in, but not much more. And certainly, no more money. The $1.00 really does cover it.

Becco has lots of patents, granted as a result of innovations in the use of Hydrogen Peroxide and other Peroxygen chemicals developed in Becco's Research Laboratories. But they don't do us a whole lot of good locked tightly in our safe. So, we long ago adopted the following policy:

If one of our patents can help you, we'll be glad to license the rights to you **perpetually,** for just one dollar. You get a nice certificate, incidentally, to cover the legalities, but more important — you also get free our complete engineering help in setting up your process, handling the material, maintenance, etc., etc.

What do **we** get? You as a **customer** — we hope — but there's no obligation on your part. Just seems to work out that way, though — when we know enough about a particular peroxygen to hold a patent on its use, chances are we've also learned enough to produce it purer than anyone else. You benefit from this; we do, too.

Use the coupon below to ask for a Sales Engineer — or our list of patents — that may help you solve an important problem.

What's a PEROXYGEN?

Fact is, "peroxygen" is a word that Becco uses to indicate that we can tie oxygen onto just about anything.

How come? Well, years of experience in producing Hydrogen Peroxide has produced an affinity between Becco and oxygen — an affinity we have capitalized on to give you compounds that will provide a ready source of oxygen — wherever, however and whenever you need it.

We have a good number of such compounds on the shelves. Quite a few others are in development. Still others are merely in our minds, but we can begin drawing them out if you're interested.

We hope you are interested. But we'll never know—unless you fill in the coupon below and mail it to us. Why not?

Problems in handling Hydrogen Peroxide

?

Becco's Four-Fold Engineering Service Program—offered free—includes:

1. Comprehensive survey of your facilities.
2. Specific proposal with recommendation of proved equipment and where it is obtainable.
3. Installation supervision by Becco.
4. Periodic inspection and permanent service.

Can you use this free Becco help, based on more years of experience with bulk handling of H_2O_2 than any other manufacturer? Use the coupon to let us know.

BECCO fmc

BECCO CHEMICAL DIVISION, FMC
Station B, Buffalo, New York

Dept. TI-F

Gentlemen:

Please send your list of patents available on the use of

- ☐ Hydrogen Peroxide
- ☐ Peroxygen Chemicals
- ☐ Persulfate Chemicals
- ☐ Please have a Sales Engineer call.

NAME_____

FIRM_____

ADDRESS_____

CITY_____

ZONE____ STATE_____

BECCO fmc

BECCO CHEMICAL DIVISION, FMC
Station B, Buffalo, New York

Dept. TI-D

Gentlemen:

Send me more information about Becco Peroxygen Chemicals.

NAME_____

FIRM_____

ADDRESS_____

CITY_____

ZONE____ STATE_____

BECCO fmc

BECCO CHEMICAL DIVISION, FMC
Station B, Buffalo, New York

Dept. TI-B

Gentlemen:

Please tell me more about your Four-Fold Engineering Service.

NAME_____

FIRM_____

ADDRESS_____

CITY_____

ZONE____ STATE_____

Textile Industries

Formerly "COTTON"

MAY 1960 VOL. 124, NO. 5

CONTENTS

SPECIAL FEATURE

143 **Preview of The American Textile Machinery Exhibition—International**

36-page word-and-picture description of exhibits which suppliers to the industry are planning for the American Textile Machinery Exhibition to be held in Atlantic City, N. J., May 23-27, 1960. **On page 144** is helpful general information about the show. **On pages 145 through 174** are descriptions of exhibits. **On pages 175 through 178** is a handy, simplified floor plan to enable readers to quickly locate any exhibitor.

MANAGEMENT

137 **Atlantic City or Sea Island?**

Are mill officials who have chosen sun and sand over a crowded exhibition hall making the choice which is in the best interests of the future competitive position of their mills?

205 **Textile Executives discuss education**

Are the textile colleges meeting the challenge of educating men for a changing industry? Should their objectives be reappraised? Officials of 88 firms give their views.

COTTON AND MAN-MADE FIBERS

179 **Planning modernization?**

How a large cotton mill was completely rejuvenated without loss of production.

192 **Saaba textured yarn**

What it is, how it's made, and where it's used. Third article of a series covering the various types of textured yarns.

194 **Gauges in Draper loom maintenance**

Why loom gauges are needed in the mill and how to use them. Part 4—More on lay alignment, including replacing the shuttle race and aligning it with the lay ends.

195 **S.M. 27—A man-made, high modulus, cellulosic fiber**

The course of research one man-made fiber producer is pursuing to overcome rayon's traditional limitations is outlined in this abstract of a paper presented at the annual meeting of Textile Research Institute.

209 **Choosing the best draft**

Results of an SRRL study which mills processing medium staple cotton can use to more profitably balance the factors of cost and quality in allocating drafts from picking through spinning.

194-C Man-made fiber use gained steadily in last ten years, study shows

249 Test discloses sulfur or sulfides remaining in rayon

251 Remove hit-or-miss from nylon package tare

251 Some causes of yarn variation

253 On "dirty" spinning

CONTINUED ON NEXT PAGE ▶

Textile Industries

MAY 1960

CONTENTS CONTINUED

WET PROCESSING

182 **Finisher's own finish**
Lynrus Finishing Co. developed and applies its own permanent flame retardant to customers' fabrics.

195 **Crease recovery of cellulosics**
Abstract of paper entitled "Crease Recovery and Wash-Wear Behavior in Cellulosic Fabrics" which was presented at the recent annual meeting of the Textile Research Institute.

WOOL

186 **Clothing woolen cards**
Word and picture presentation of procedure for applying clothing to woolen cards, how to determine when to replace clothing, recent card clothing developments, how to examine new clothing, what is done in the mill to shorten clothing life.

255 How a woolen mill solved a roving handling problem

KNITTING

233 **WK-A lifts ceiling on style**
New knitting method increases half-hose pattern and color possibilities; pattern edges are sharper, inside floats fewer.

238 **Integrated lace making**
Connecticut firm finds raschel knitting offers broad possibilities in lace design; also ease and economy of operation.

241 Newly formed institute to promote tricot fabric consumption

253 Keeps circular knitter chains in order

DEPARTMENTS

6	Shorts and remnants	137	Executive views
16	Personal notes	139	Future events
34	Supplier notes	249	How others manage
54	Mill notes	261	New product parade
125	News in brief	263	Free booklets
133	Technical developments	313	Advertiser's index

EDITORIAL AND EXECUTIVE OFFICES: 806 Peachtree St., N. E., Atlanta 8, Georgia—Phone: TRinity 4-4462

George H. Dockray, Editor

J. Frank Guest, *Managing Editor*

Milton C. May, *Associate Editor*, P. O. Box 11015, Charlotte 9, N. C.

Stanley M. Suchecki, *Associate Editor*, P. O. Box 685, Ridgefield, Conn.

Jesse W. Ellington, *Associate Editor*

Ann W. Hardy, *Assistant Editor*

J. A. Moody, *Production Manager*

H. Redfern Hollins, *Director of Circulation*

John C. Cook, Vice-Pres. & Business Manager

Walter M. Mitchell, Jr., *Advertising Manager*

BUSINESS REPRESENTATIVES

BOSTON—Arthur C. Shaw, *27 Southgate Rd., Wellesley 81, Mass. (Phone: Cedar 5-3648).*

NEW YORK—William K. Hoffman, *58 Euclid Ave., Maplewood, N. J. (Phone: South Orange 2-2484).*

BUFFALO AREA—J. D. Parsons, *39 Atlantic Ave., Cohasset, Mass. (Phone: Evergreen 3-0712).*

PHILADELPHIA—James R. Corgee, *27 E. Windermere Terrace, Lansdowne, Pa. (Madison 6-9145).*

CHICAGO—Richard F. Hanrahan, *333 N. Michigan Ave., Chicago 1, Ill. (Phone: Central 6-6964).*

CLEVELAND—A. E. C. Smith, *R. F. D. 3, Eagle Rd., Willoughby, Ohio (Phone: Clifford 6-3742).*

CHARLOTTE—W. Cliff Rutland, *Box 162, Gastonia, N. C. (Phone: University 7-7995).*

LOS ANGELES—Warren R. Christian, *4140 Edenhurst Ave., Los Angeles 39, Calif. (Hollywood 2-1133).*

SAN FRANCISCO—Fred Jameson, *821 Edenburgh St., San Mateo, Calif. (Diamond 3-8806).*

EUROPE—Mrs. Wally Schottlaender, *Schulzendorfer Strasse 34, Berlin-Hellgensee, Germany.*

NBP

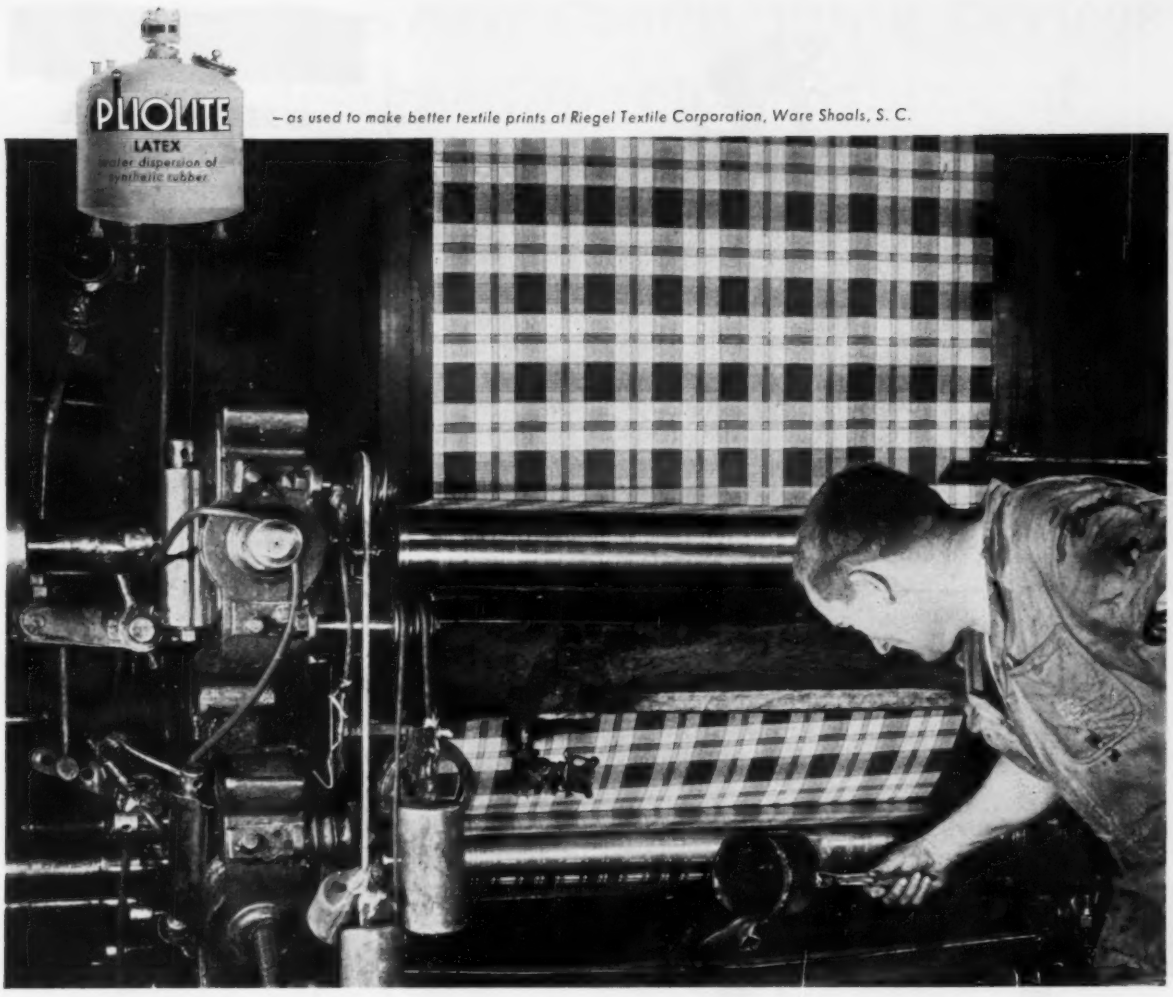
BPA

TEXTILE INDUSTRIES is published monthly, with an extra issue in September, by W. R. C. Smith Publishing Company, William J. Rooke, chairman of the board; Richard P. Smith, president and treasurer.

Copyright © 1960 by W. R. C. Smith Publishing Co.

Indexed in "Applied Science & Technology Index."
Executive, Editorial, Subscription, and Advertising Offices are located at 806 Peachtree St., N. E., Atlanta 8, Georgia.

Subscription Rates: United States and Possessions, $2.00 for one year; Canada, South America, Central America, $5.00 a year; Foreign Countries, $10.00 a year.
PUBLICATION OFFICE: 116 E. Crawford St., Dalton, Ga. Second-class postage paid at Dalton, Ga., and at additional mailing offices.
Postmaster: Please send notices by Form 3579 to 806 Peachtree St., N. E., Atlanta 8, Ga.



—as used to make better textile prints at Riegel Textile Corporation, Ware Shoals, S. C.

There's less "crocking," less "tarnishing" with PLIOLITE LATEX

If you're having trouble with crocking in your emulsion printing, here's a tip: Look into the many synthetic latices by Goodyear.

Take the case of one industry leader. *Eight years ago,* he started modifying his emulsions with PLIOLITE LATEX. The results are shown in the crocking test at left.

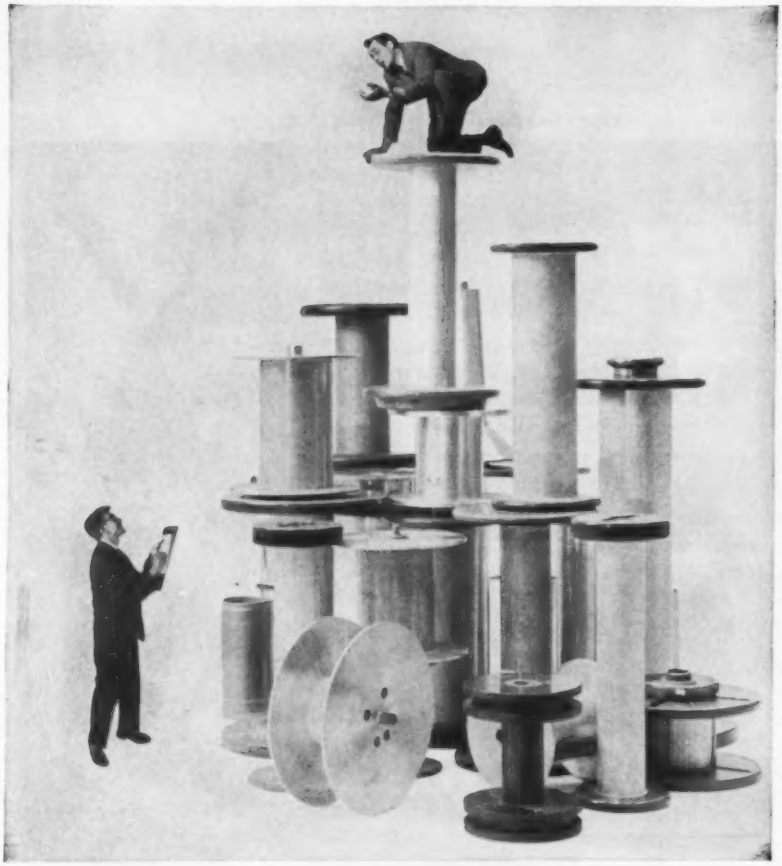
PLIOLITE LATEX not only minimizes crocking, but also reduces "tarnishing"—effectively cutting down roll clean-up time. What's more, it permits good color values, adds to the binding strength of the emulsion and improves the print's resistance to the abrasion of laundering.

Why not learn more about PLIOLITE LATEX and the other latices in the Goodyear line? Full details, including the latest *Tech Book Bulletins,* are yours by writing Goodyear, Chemical Division, Dept. Q-9439, Akron 16, Ohio.

GOODYEAR

CHEMICAL DIVISION

Pliolite—T. M. The Goodyear Tire & Rubber Company, Akron, Ohio



GOT A BOBBIN PROBLEM...?

With higher speeds? bigger packages? longer life? moisture?

drive accuracy? balance? synthetic yarns? pressures?

CHECK IT WITH US AT THE AMERICAN TEXTILE MACHINERY EXHIBITION • BOOTH 1233-1234

No one understands your need for bobbin design that is exactly right for your yarns, and bobbin performance that is 100% dependable, as intimately as we at the Lestershire Division of National. That's why we gear all of our manufacturing skills and services to your bobbin problem . . . not just to the manufacture of one convenient "standard" line.

Our factory representatives take pains to study your processes. Our designers work with infinite precision, and test and re-test to assure maximum bobbin concentricity and service life. Every development in yarns is followed to keep abreast of changing bobbin requirements. We know the textile field is too competitive for you to risk the cost of poor bobbin performance, or inferior quality.

Finally, we price all Lestershire Bobbins and Spools based on built-in quality giving top performance, long life, and operating economy.

Why not toss that bobbin problem at us . . . *today?* You can get in touch with us through any of the addresses below. Or contact your nearest National sales office. Dept. W-5.

LESTERSHIRE SPOOL DIVISION

NATIONAL VULCANIZED FIBRE CO.

WILMINGTON 99, DEL. • *Plant:* **140 Baldwin St., Johnson City, N. Y.** • *In the south:* **Odell Mill Supply Co., Greensboro, N. C. • Greenville Textile Supply Co., Greenville, S. C.**

SHORTS & REMNANTS

Milan and Atlantic City

"We are referring to your report of the E.I.A.T. 1959 Fair in Milan that you described in your TEXTILE INDUSTRIES of November, 1959. We would like to get some more information about the following exhibits . . ."

P. ROBREDO
Robredo, Thornton y Cia.
Puebla, Mexico

► Sir, we suggest that a visit to Atlantic City, N. J., May 23-27, will be of great interest to you. See preview which begins on page 143 of this issue.

Important developments shown at Milan will also be seen at the American Textile Machinery Exhibition-International—plus much more. To

ATMA

PARADE OF PROGRESS

the many others who asked about various items of machinery and equipment shown at Milan, we pass along the same advice. And remember, TI's editors, and representatives of the circulation and advertising departments will be at Booth 415-416

Welcome to Booth 415

on the Boardwalk Level all during the week of the Show. Come see us!

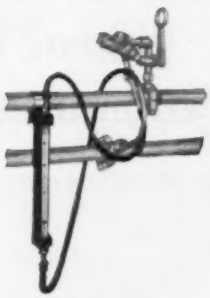
PA Got Reactions

"I thought you might be interested in some reactions I have received concerning my recent article, 'Human Relations in Purchasing,' in the February issue of TEXTILE INDUSTRIES.

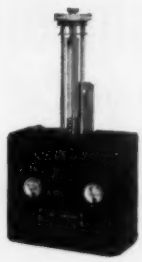
"From the salesmen, it was rather comical at first. Some of them, on

These Amco Air Conditioning Devices are designed for close control of atmospheric conditions within your mill

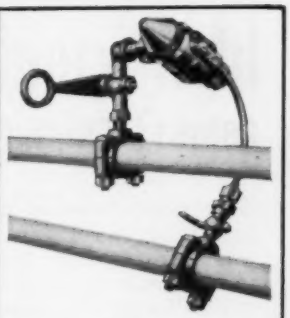
No. 6 Atomizer



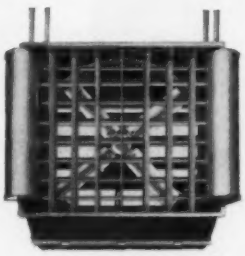
Atometer



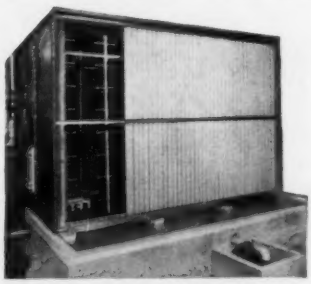
Humidity Control



Aeromizer



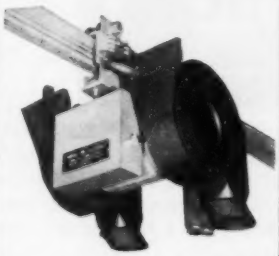
Evaporative Cooling Unit



Air Washer

Modulating Interrupter

Ceiling Cleaner



Loom Cleaner

Sling Psychrometer

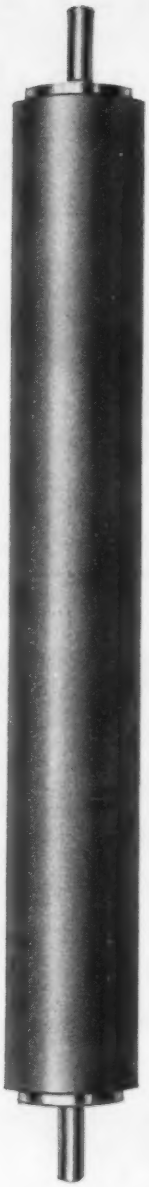
Blow-Thru Diaphragm Valve

See them at the TEXTILE SHOW at ATLANTIC CITY
May 23-27 • Booths 51-56

Amco Air Conditioning Devices are *quality* textile mill equipment . . . backed by a company with more than 70 years experience in solving textile air treatment problems. You can always rely on Amco to give you dependable advice and an expert installation best suited to your needs.

AMCO
Since 1888
Air Conditioning Equipment — Textile Specialties
American Moistening Company, Cleveland, North Carolina
Branches: Atlanta, Ga., Providence, R. I., Toronto, Ont.

the world's largest exclusive manufacturer of rolls for industry



SAM'L BINGHAM'S SON MFG. CO.

MANUFACTURERS OF

INDUSTRIAL ROLLS

HOME OFFICE

636 Sherman, Chicago 5

SERVICE LOCATIONS

Atlanta
CHICAGO
Cincinnati
Cleveland
Dallas
Des Moines
Detroit
Houston
Indianapolis
Kalamazoo
Kansas City
Milwaukee
Minneapolis
Nashville
Pittsburgh
St. Louis
Springfield, Ohio

BINGHAM BROS. DIV.

New York City
Baltimore
Rochester
Philadelphia
Cambridge
Jersey City
Garwood, N. J.

SLASHER ROLLS
MANGLE ROLLS
DYE PAD ROLLS
TOMMY DODD
PRINT ROLLS
PADDER ROLLS

SINCE 1826

MORE THAN 3½ MILLION SPINDLES NOW EQUIPPED WITH ROBERTS HIGH DRAFT

ROBERTS SPINNING NEWS

PUBLISHED BY ROBERTS COMPANY SANFORD, NORTH CAROLINA

SANFORD, NORTH CAROLINA, U. S. A. 1960

Roberts enters new textile machinery field

Adds Worsted Preparatory Equipment to Line of Spinning Frames

Roberts-Tematex ParaBlender with individual ball delivery.

Three new worsted system preparatory machines of latest design and technological improvement — ParaDrafters, AutoEveners, and ParaBlenders —have been added to the Roberts Company line under the name Roberts-Tematex.

They are used in yarn spinning mills as well as in combing and top making plants to pin, parallelize, draft, and blend worsted and other long staple fibers in operations that precede roving and spinning.

Roberts-Tematex machines are considerably more rugged than other machines which are available, hold their settings well and provide high production performance.

The *ParaDrafter* parallelizes and drafts the fibers and can be combined with the *AutoEvener* which automatically evens the weight of the delivered sliver through electronic and mechanical means to within ±1%, from an entering weight variation of up to ±20%.

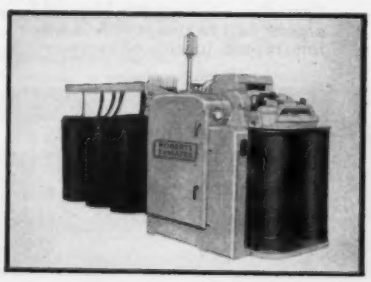
ParaBlenders also parallelize and draft but in combination with a blending operation that provides many doublings and sandwich blends the fibers.

ROBERTS-TEMATEX PARADRAFTER • 8″ wide pinning field, 88 fallers per head, flat pins • Three thread faller screws • Fallers .238″ thick, pitch .354″, 1200 drops per minute • Entering sliver up to 3500 grains per yard • Draft ratios 5 to 15 • Net production delivery up to 270 pounds per hour • Creels for up to 12 cans or balls or combination of cans and balls • Delivery to cans 15″ x 36″ up to 24″ x 48″ • Delivery to balls up to 24″ diameter x 18″ wide (26 pounds) • Hydraulic weighting of the delivery rolls • Hydraulic lifting of head for inspection • Shock absorbers for faller drops • Gradual introduction of fallers into sliver • Automatic stop motions with indicator board to show location of stoppage • Central lubrication • Simple changing of draft and pressures • Static eliminator • With single, bicoil, dual or quad delivery

ROBERTS-TEMATEX AUTOEVENER • Automatic and instantaneous correction of sliver weight • Corrects entering sliver with plus or minus 20% variation • Corrects delivered sliver weight to plus or minus 1% • Mechanical-electrical operation of the measuring, delay and variation units • Fitted only to single head, single delivery ParaDrafter • All ParaDrafter technical details apply

ROBERTS-TEMATEX PARABLENDER • All ParaDrafter technical details as above apply • Melange blending of a high number of slivers • Net Production 400 to 500 pounds per hour • Combines two ParaDrafter heads • Individual ball delivery for each head so machine can be used as two parallel ParaDrafters • Arrangement for combining and sandwich blending finished slivers onto a center ball delivery • Pressure spray oiling for center ball

PARADRAFTER arranged for can feed and dual delivery.

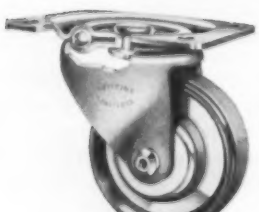


NEW!

Faultless
100 and 500
SERIES
Textile
Casters

Series 500
Rigid Plate
Caster

Snagged threads that bind doff box or truck casters needn't stop your textile production! Faultless has designed NEW *textile casters* with *wide*, easy-to-get-at *clearance* between caster wheel and horn. Low cost Faultless 100 and 500 Series Casters also feature corrugated steel construction for added strength, ball bearing assembly in hub to absorb side thrust, deep drawn thread guards, and wide choice of wheels to suit a variety of load and floor conditions.



Series 100
Swivel Plate Caster

Special sturdy King Pin; large diameter ball bearings roll in uninterrupted, lubricated raceway.

Ask Your Distributor

Your local Faultless Industrial Distributor has a wealth of information on caster applications, and he maintains a caster stock. Both he and the local Faultless Sales Engineer will be glad to work with you.

NOELTING
Faultless Caster Corporation
Casters
Evansville 7, Indiana

Branch Offices in principal cities; see the Yellow Pages of the telephone book under "Casters."
Canada: Stratford, Ontario

SHORTS & REMNANTS

(from page 6)

their first visit after reading the article, were not too sure about the proper approach to use with me or even how to begin their sales conversations. After talking a few minutes, and after they had told me about reading the article, we were able to break the ice. Then most of them told me they had found the article most helpful to them in their understanding of what a purchasing agent expects of them. Several told me that they had discussed the article with other purchasing agents they called on, and that in general these PA's thought it was very good and was something that was needed in the salesman-PA relationship.

"I have received several letters from sales managers and vice-presidents of sales complimenting me for writing such a straightforward and useful (for training) article. I also received an invitation to speak and elaborate my feelings and findings before a group of salesmen. I accepted, and was given 30 minutes to discuss my article. At the end of the 30 minutes I asked for questions or comments, and we talked for over an hour and a half!

"You can see that I did receive much pleasure from writing the article. Thank you very much for making that possible."

P. H. DOUGHERTY
Purchasing Agent
Sellers Mfg. Co.
Saxapahaw, N. C.

Governor Liked Prison Story

"I wish to thank you for . . . the copy of the February issue of TEXTILE INDUSTRIES, which contains a story on the Kilby Prison cotton mill. . . Especially was I impressed to learn of your high regard for our prison officials. We, too, are very proud of them and are glad to have their services. . ."

JOHN PATTERSON
Governor
State of Alabama
Montgomery

TI in the Movies

We were interested to see these titles in a new catalogue of the Industrial Management Society's film rental library: "T.I. Dividends," and "T.I. and You." We immediately thought of you, the TI reader, and the dividends you get from regular reading of this here magazine. But these films concern another TI—Texas Instruments, Inc., with whom we've been confused before. In this

ONLY ONE TO TWENTY...

ONLY ONE PART OF IMMUNOL

REG. U.S. PAT. OFF.

to 20 parts of water makes an outstanding solution that Cleans and Rustproofs Textile Equipment.

This solution is:

• NON-FLAMMABLE • NON-TOXIC
• ODORLESS • VERY ECONOMICAL

It replaces ALL solvents

Write today for a free sample

HARRY MILLER CORP. HAMICO 4th & BRISTOL STREETS PHILADELPHIA 40, PA.

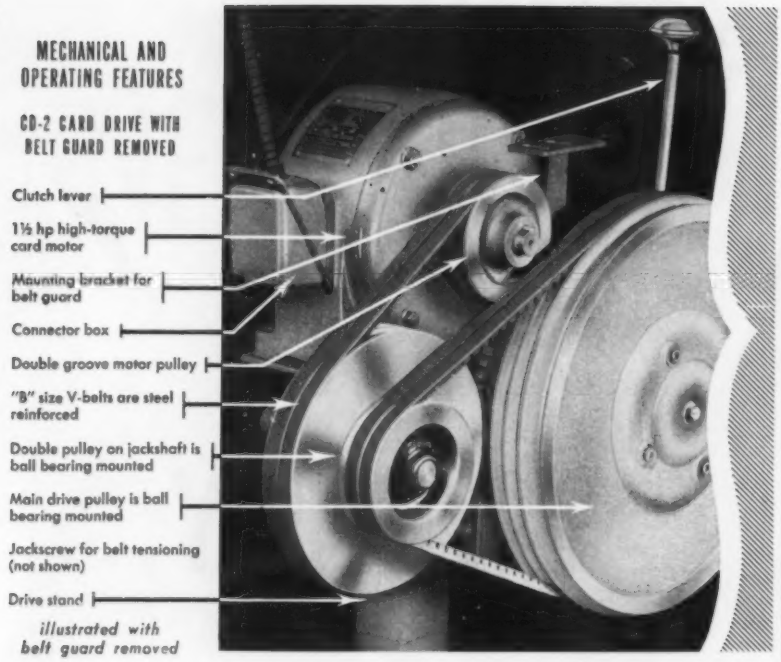
Manufacturers of:
• IMMUNOL • GLYCOLA • POTENTOL
• FIBREGARD • REVERSOL • ACTIVOL
• FIRMTAL

HARRY MILLER CORP.

Original Products and Processes Since 1936

4th and BRISTOL STREETS • PHILADELPHIA 40, PA. • DAvenport 4-4000

Service Representatives in Principal Cities


MECHANICAL AND OPERATING FEATURES
CD-2 CARD DRIVE WITH BELT GUARD REMOVED
Clutch lever
1½ hp high-torque card motor
Mounting bracket for belt guard
Connector box
Double groove motor pulley
"B" size V-belts are steel reinforced
Double pulley on jackshaft is ball bearing mounted
Main drive pulley is ball bearing mounted
Jackscrew for belt tensioning (not shown)
Drive stand
illustrated with belt guard removed

ONLY SOUTHERN STATES TYPE CD-2 INDIVIDUAL DRIVE FOR COTTON CARDS OFFERS ALL THESE FEATURES

The CD-2 Individual Card Drive is the simplest, safest, and most efficient drive on the market today. It combines into one unit the features most wanted by mill men when specifying a drive for cotton cards. Here is why:

Finger-Tip Control: No changes in operating procedure. The unit is controlled by a simple clutch lever in both starting and hand stripping.

Full Speed in Seconds: A 1½ hp high torque card motor smoothly brings the card into full operation, seconds after the clutch is engaged.

Safety Engineered: All belts and moving parts are covered. Starting and idling is accomplished by the clutch lever. Stripping is done in the conventional manner.

Rugged Construction: The entire unit is built for heavy-duty service: steel main stand; cast iron jackshaft bracket and main pulley; cast aluminum cover; ball bearing construction throughout.

Easy Installation: Fits any cotton card. Minimum number of holes to drill in frame. Drive pulley, collar and clutch are preassembled and slip on shaft using existing keyway.

See your Southern States representative for all the facts, or you may write direct for Bulletin 301-a.

SOUTHERN STATES
EQUIPMENT CORP.
HAMPTON, GEORGIA

SHORTS & REMNANTS

(from page 10)

case, the films deal with work simplification programs; the catalogue also lists films concerned with industrial engineering, training, and education. If you'd like a copy of the list, write to IMS, at 330 S. Wells St., Chicago 6, Ill.

TI "Secretary" Gets Around

The following letter was received recently by an official of Conover-Mast Publications, Inc., publishers of magazines in the aviation, space, construction, purchasing, and industrial fields:

"Recently I was presented with a small booklet which can also be used for keeping certain technical data. This booklet is entitled "My Private Secretary" and it is produced by . . . TEXTILE INDUSTRIES. It contains very valuable information which is constantly in use by design engineers, maintenance engineers, consultants and architects as well as management operating men in connection with the textile industry.

"I have been so impressed with this small booklet that I am writing to . . . determine if you have ever published such a booklet . . . and if not I would suggest that . . . it would be worthwhile for you to consider . . ."

W. F. LISMAN
Vice-president
Furnas Electric Co.
Batavia, Ill.

► And this "impressive booklet" can be had for just 50 cents with a subscription to TEXTILE INDUSTRIES!

PO Knows TI

A magazine from Bucuresti, Rumania (sent by registered mail!), addressed to "TEXTILE INDUSTRIES, Peachtree Ga." arrived the other day. And a letter sent to us at "Terminal Tower, Cleveland, O." reached us in Atlanta only three days after it was mailed in New York. We haven't figured that one out; we'll just file it with the two air-mail letters, one from Boston, Mass., and one from Hong Kong, and both postmarked the same day, which reached us in the same mail.

► The Masquers, a theater group at Massachusetts State Prison, sent an order for three prison uniforms to Brooks Costume Co., for use in their production of the play, "My Three Angels." "Ours are not authentic enough," they said.

Clinic Papers TI Exclusive

The full text of all the papers presented at the Cotton Research Clinic on May 31-June 2 at the Grove Park Inn, Asheville, N. C., will appear exclusively in TEXTILE INDUSTRIES, starting with our July issue. After publication, the papers will be reprinted under one cover, and will be available from the National Cotton Council, sponsors of the Clinic.

Large Weft Difficulties

"We are very interested to have a large information in that concerning the more important difficulties that are appearing in the weft of thick yarn and also the way of preventing such difficulties."

GERENTE
Hijos de Francisco Sans, S.A.
Barcelona, Spain

Accolade

"May we once again express our enthusiasm for your valuable articles."

H. J. FRANKLYN
Vice-President
Lynrus Finishing Co., Inc.
Poughkeepsie, N. Y.

► We like you too, Mr. Franklyn; see page 182 of this issue of TI.

Crying Problem

"Can you supply information on removing urea formaldehyde vapors from stockroom in the summer? [Visitors' eyes fill with tears.]"

H. ROTHMAN
Buyer
Allegro Fabrics, Inc.
New York, N. Y.

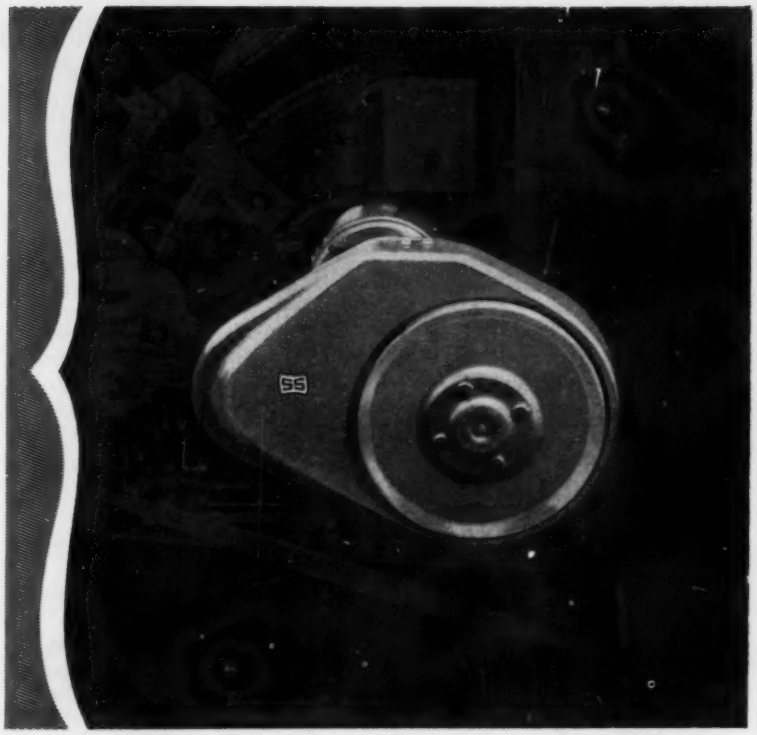
► Do readers have any suggestions?

More Wash-and-Wear

"We will greatly appreciate your sending . . . an extra copy of the excellent Wash-and-Wear report that appeared in the October, 1959, issue."

EDWIN G. EYERLY
Cranston Print Works Co.
New York, N. Y.

► This special TI feature continues to draw reprint requests. Among those asking for extra copies recently were **Nicholas Ruberti,** QC Chemist, USF-Aspinook Finishing Div., Adams, Mass.; **David D. First,** tech. librarian, Talon, Inc., Meadville, Pa.; **W. M. Potts,** Dominion Dyeing & Printing Co. Ltd., Drummondville, P.Q.; **Robert H. Phillips,** asst. dir. R & D labs, Cranston Print Works Co., Cranston, R. I.; **Thomas E. Bonaccorsi,** United Elastic Corp., Lowell, Mass.; **Richard N. Ring,** res. chem., J. P. Stevens & Co., Inc., Garfield, N. J.; and **Philip R. Duclos,** suprvr.,



SOUTHERN STATES CD-2 CARD DRIVE COMBINES INTO ONE UNIT ALL OF THE FEATURES WANTED FOR COTTON CARDS

Here is why we honestly believe the Southern States CD-2 Card Drive is the safest, simplest, most efficient individual drive on the market today:

Finger-tip control. No changes in operating procedure. Unit is controlled by simple clutch lever in both starting and hand stripping.

Full speed in seconds. A 1½ hp high torque card motor brings card into full operation, seconds after clutch is engaged.

Safety engineered. All belts and moving parts are covered. Starting and idling is accomplished by simple clutch lever.

Rugged construction. The entire unit is built for heavy-duty service: steel main stand; cast iron jackshaft bracket and main pulley; cast aluminum cover. Ball bearing throughout.

Easy installation. Fits any cotton card. Minimum number of holes to drill in frame. Drive pulley, collar and clutch are preassembled and slip on to shaft using existing keyway.

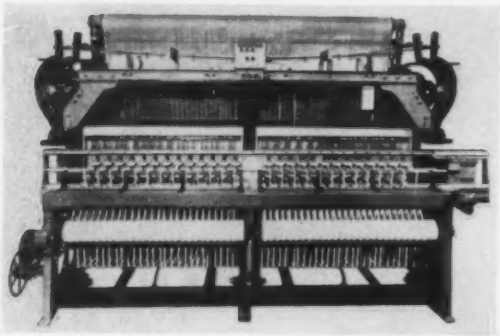
Get the facts from your Southern States representative or write for Bulletin 301-a.

SOUTHERN STATES
EQUIPMENT CORP.
HAMPTON, GEORGIA

See These FLETCHER 1960 MODELS In Production

Booths 555-556-557-558 ATMA SHOW

The New Fletcher MULTI-FAB High Speed Automatic Loom



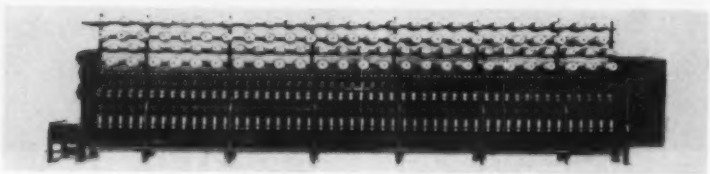
9 foot loom

built for maximum production of quality narrow fabrics

300 picks a minute For light and medium fabrics,

- **ribbons**
- **tapes**
- **elastic**
- **glass**

Fletcher MASTER DUPLEX DOUBLER-TWISTER



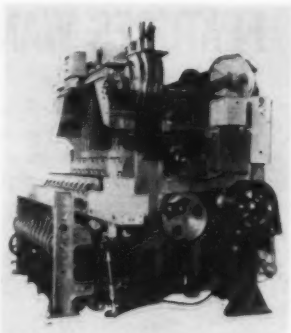
This new, big sturdy precision-built machine with ring size 4¾"—5" has speeds up to 9,000 RPM. Twists up to 8 ends.
Three type packages; conventional 2-headed, tapered top and tapered at both ends.

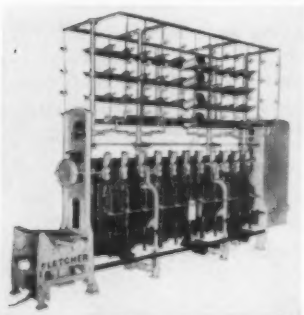
Provides the ultimate in flexibility on all yarns, synthetic or natural.
Gives you larger yarn packages for high-speed, tension-free delivery.

FLETCHER POWER-FAB

High Speed Automatic Loom

5 foot loom • 54 inch traverse warp beams • Quills to 1¾" diameter heads • 250 picks per minute for type I to type IV government web, elastics, plastic webbing • 300 picks per minute for light fabrics, ribbons, tapes and glass.





The BIG 5 POUND PACKAGE FLETCHER JUMBO DUPLEX DOUBLER TWISTER

5 pounds of Continuous Twisted and Doubled High Quality Woolen-Worsted, Textured, Synthetic and Cotton Yarns.

Bottle Bobbin, Straight or Taper packages. 22-spindle and 72-spindle 6" ring, 9-inch and 10-inch traverse.

FLETCHER INDUSTRIES

STATESVILLE, N. C.

FLETCHER WORKS
PHILADELPHIA 40, PA.

FLETCHER SOUTHERN
SOUTHERN PINES, N. C.

SHORTS & REMNANTS

(from paye 14)

Pioneer Valley Finishing Corp., Holyoke, Mass.

Miscellaneous Requests

More information on items appearing in J. B. Goldberg's column—**R. W. Simpson,** Janesville Cotton Mills, Janesville, Wis.; **H. J. Burnham,** ch. test engr., Saco-Lowell R & D Center, Clemson, S. C.; **Arthur E. Manasian,** res. chem., Huyck Felt Co., Rensselaer, N. Y.; and **Daniel Frishman,** dir. R & D, Malden Ltd., Lawrence, Mass.

Reprint of "Highlights of the Labeling Law" (TI for August, 1959) —**J. L. Johnson,** ch. chem., Excelsior Mills, Union, S. C.; **Charles P. Rodgers, Jr.,** Rayon Processing Co. of R. I., Pawtucket, R. I.; **Bob Charles,** pers. mgr., Kingstree Mfg. Co., Inc., Kingstree, S. C.; and Camden Yarns, Inc., Lewiston, Me.

Copy of "The Roving Frame," by Fay H. Martin—**Fred Ziprik,** asst. supt., Cone Mills Corp., Salisbury, N. C. This is available with a subscription to TI.

Any copy of COTTON (now TEXTILE INDUSTRIES) printed in 1899 or 1900—**Donald Armstrong,** Thomaston, Ga. Sorry, except for our bound volumes, we have no copies of TI further back than about 10 years. Storage problem, you know.

Information on grey-room sewing machines—**Fred L. Troll,** prod. supt., Kerr Bleaching & Finishing Works, Inc., Concord, N. C.

Where to buy a fine-index card cutting machine—**Ronald Hugo,** Philadelphia, Pa. We'll be glad to forward offers to Mr. Hugo.

Further data on twisters (TI for March, page 64)—**James Walker,** supt., Smithfield Spinning Co., Smithfield, N. C.

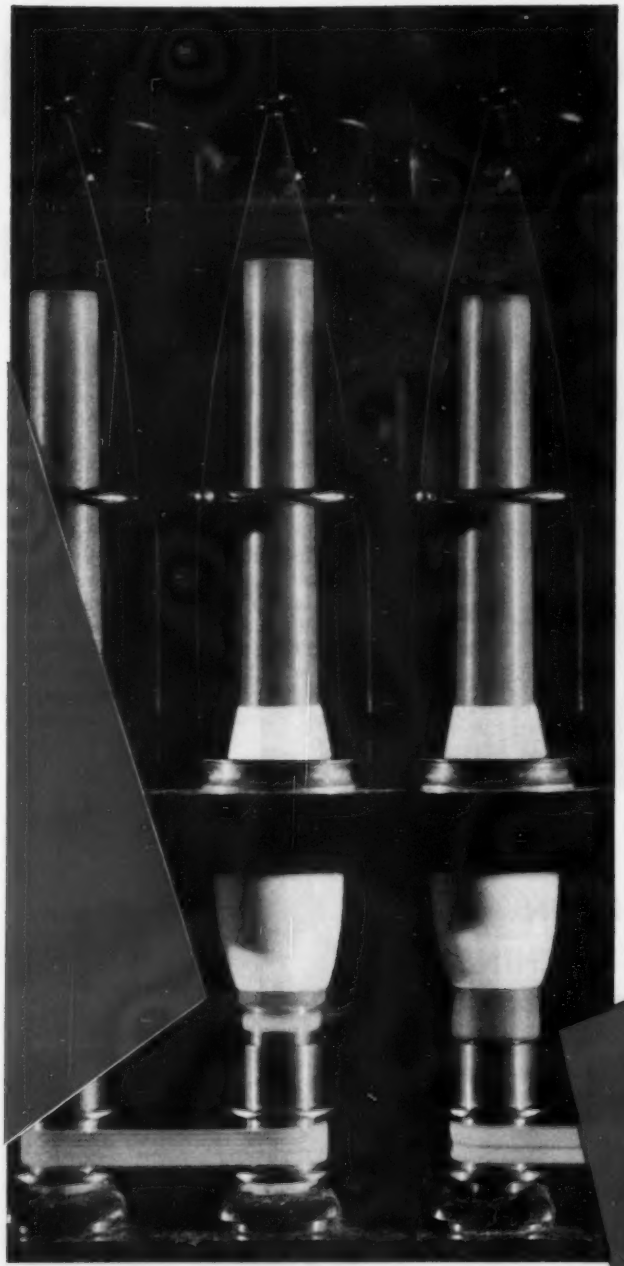
Want to represent American manufacturers of textile machinery, particularly for dyeing, bleaching, and finishing—Narotamdas Chunlal & Co., Ahmedabad, India.

Who makes flexible rubber doors? —**W. T. Pitman,** off. mgr., Cosmos Imperial Mills Ltd., Yarmouth, N. S.

Reprints of "Taslan Textured Yarns" (TI for March, 1960), and "Stretch Yarn" (TI for August, 1959) —**E. J. Schellenberg, Jr.,** Atwater Throwing Co., Plymouth, Pa.

Further information on "Quarpel" permanent water repellent finish—**H. A. Danby,** PA, John B. Stetson Co. (Canada) Ltd., Brockville, Ont.

► See you in Atlantic City later this month!



wrong correct

Impregnated ring spinning tubes

Uniform tube fit, therefore no unnecessary loss of yarn.

EMIL ADOLFF REUTLINGEN/WTTBG.-GERMANY

U.S.A. Central Organization — Textube Corporation, 695 Summer Str., Stamford, Conn.
Sub-Agents for the South: Watson & Desmond, 220 West Fourth Street, Charlotte, N. C.
Sub-Agents for Canada: Crowther Limited, 212-214 Victoria Ave., Westmount, MONTREAL P.Q.

See our Booths 661-662 at the AMERICAN TEXTILE MACHINERY EXHIBITION — ATLANTIC CITY, N J. — May 23-27, 1960

NEW TAPE *Skein Dyeing*

ZIPPER TAPES AND OTHER NARROW FABRICS MAY NOW BE DYED IN SKEIN FORM IN THIS NEW MACHINE.

NOTE THESE FEATURES

- Skeins are suspended between stainless steel dyesticks
- Dyeing done in a relaxed condition
- No snagging—no place for tapes to catch
- Air operated front door
- Handles any material—natural or man made
- Steam coil for indirect heating
- Dye and chemical feed system providing even distribution
- Capacity rated from 100-500 lb.—up to 100% overload under favorable conditions
- Complete line of models from 10-50 sticks

KLAUDER WELDON GILES MACHINE COMPANY

ADAMS AVENUE & LEIPER STREET
PHILADELPHIA 24, PA.

PERSONAL NOTES

At the spring meeting of the Southern Textile Methods and Standards Association held at Clemson (S. C.) College recently, the following officers were elected: president—**C. M. Jorgeson** of Martha Mills, Thomaston, Ga.; vice-president—**J. M. Cooper** of Firestone Textiles, Gastonia, N. C.; treasurer—**George Funderburk** of U. S. Rubber Co., Hogansville, Ga.; executive secretary—**Howard L. Loveless** of University of Tenn. New directors are: **R. L. Altman** of West Point (Ga.) Manufacturing Co.; **R. W. Malone** of Riegel Textile Corp., Ware Shoals, S. C.; and **Ben Rushing** of Dixie Mercerizing Co., Chattanooga, Tenn.

Jorgeson, Altman, Cooper

Funderburk, Malone, Loveless.

W. A. Hunt has been promoted to plant manager of Johnston (S. C.) Mills, a unit of the worsted division of Excelsior Mills, Inc. **M. F. Bond, Jr.,** was named to succeed Mr. Hunt as product manager for men's wear for the worsted division. * * * **Jules Lasnik** is now product manager-coordinator for Abbeville Mills Corp., Laurens Mills, and Excelsior Mills, Inc., worsted divisions.

Col. Hoke S. Wofford has been appointed commanding officer of Head-

Continued on page 20

Less than 8% of loom parts account for more than 80% of downtime!

Studies conducted by H.F.Livermore Corporation in the course of Research and Development for improved loom performance prove that *less than 8% of all the parts in a loom account for more than 80% of downtime.*

Highly Stressed Parts — the Costly 8%

This vital 8% is made up of those highly stressed parts which are continuously subjected to the severe punishment of violent impact and repeated shock loads during loom operation. When they fail, they do so suddenly, resulting in costly runs of imperfect fabric. Today's trend toward increased operating speeds makes the performance of these highly stressed parts even more critical.

Metallurgical Skills - Creative Engineering

HFL has been solving problems of the weave room for three generations through creative engineering, metallurgical skills, and efficient production techniques. Rapid advancement in the field of metallurgy has provided most important means by which *improved* loom parts can be developed. For example, pearlitic and carbon steel alloys offer greater impact strength and less weight than conventional cast iron. H.F.Livermore Corporation redesigns highly stressed loom parts, incorporating the advantages of these improved metals. *The results are always better performance and from 300% to 1000% longer useful working life.*

DOBBY HEAD PARTS AND ASSEMBLIES Precision-engineered and made from today's most advanced materials to provide 400% to 1000% longer useful life.

FILLING HOLDER AND CUTTER (SERIES 8300, 4845) FOR PLAIN OR BOX LOOMS Eliminates sidelines due to wear of holding blades. Holds all types and sizes of filling in straight line before and during cut.

VIBRATOR COMBINATIONS Parts guaranteed interchangeable in Head Motion. Surfaces requiring clearance held to .005 inch tolerance. Vibrator Levers and Connectors will not bend, eliminating Harness Skips.

PRECISION-MACHINED PICKING MOTION PARTS FOR C & K LOOMS Assure uniform, more efficient picking from loom to loom. Eliminate need to compensate for variations in cast parts.

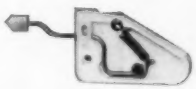
LAY-MOUNTED SCISSOR-TYPE THREAD CUTTER SERIES 4962 FOR S-6 LOOMS Costs less, does more . . . eliminates drag-ins and sidelines caused by filling partially cut or missed entirely.

PARALLEL AND PICKING MOTION PARTS FOR DRAPER LOOMS Assure true shuttle flight, eliminate erratic boxing conditions due to rough castings, unfinished paralleling parts.

ATMA

Come and see us and get the complete story of the "8/80" at the ATMA

Booth Nos. 322, 323 & 324
Atlantic City, May 23-27



MIDGET FEELER Unique design reduces probability of premature transfer of full or partially full bobbins. Extreme sensitivity assures positive indications with empty bobbins. Settings are positive, easy, and certain.

Write for HFL Catalog Sheets on these preferred parts.

HFL

IMPROVED LOOM PARTS

H. F. LIVERMORE CORPORATION

ESTABLISHED 1887

EXECUTIVE OFFICES & PLANT
BOSTON 34, MASS.

SOUTHERN DIVISION
GREENVILLE, S. C.

Why Gates Lug Straps last longer... insure smoother operation

Super Tex-Hide Lug Straps

Users report up to five times longer service on their heaviest looms from Super Tex-Hide than from any other strap.

New Thin-Tex Lug Straps

When extreme flexibility and much lighter weight are needed, Thin-Tex Lug Straps give up to 25% longer life than ordinary straps... and smooth out loom operation.

Because of the great strength of Tex-Hide—a product of Gates *Specialized* Research—the block can be molded into the strap without the use of bolts or rivets. As a result, straps are streamlined and light in weight.

Yet, because of their superb resilience, they give longer service, and smoother operation, *than any other strap you have ever used.*

2 big advantages of Gates Tex-Hide Lug Straps

1 Tex-Hide Lug Straps combine great strength with unsurpassed resiliency. They soak up blows and shocks *without taking any permanent stretch.*

2 Further, the great resiliency insures long life for *all parts* of the picking motion, and gives extended periods of operation *without any strap adjustments.*

Gates Distributors are in the YELLOW PAGES

The Mark of Specialized Research

The Gates Rubber Company

Denver, Colorado

Gates Rubber of Canada Ltd., Brantford, Ontario

Gates®

TPA 902

Take-up Roll Coverings
Card Bands
Cone and Evener Belts
Spinning Frame Drives

Reversible Pickers

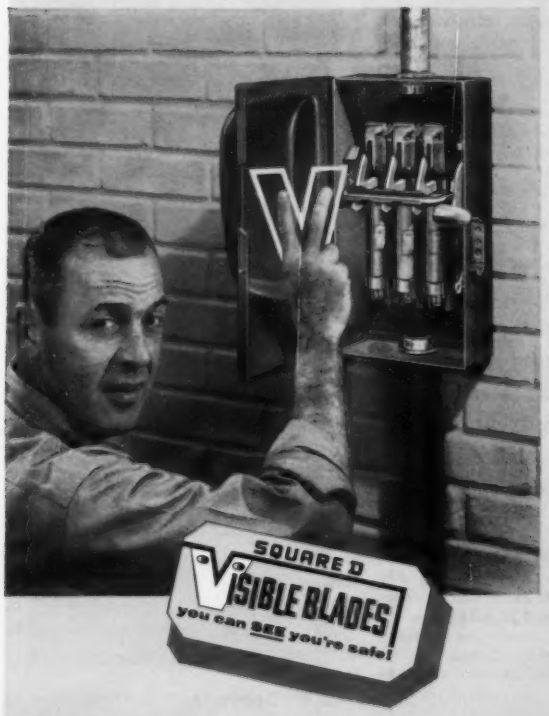
Tex-Hide Harness Straps

Tex-Hide and Vulco Loop Pickers

4-in-one Check Straps
Multi-Check Straps

Gates Textile Accessories

FOR SAFETY YOU CAN SEE REMEMBER THE "V" FOR VISIBLE BLADES!



• The men who pull the switches will tell you what can happen when a switch, *believed* to be open —*isn't*. A lot of things can happen—and every one of them is bad. Personnel safety is in jeopardy. Motors can single-phase. Machinery and work can be damaged. Down-time can skyrocket.

Doesn't it make sense to insist on Visible Blade construction which gives you a road block against any of those possibilities? Doesn't it make equally good sense to insist on the safety switch which gives you that construction—plus a lot of other performance advantages? Evidently it does, because *Square D switches have never been out of first place in more than 50 years!*

They cost no more... why settle for less?

MAIL the coupon for latest Safety Switch Bulletin

Square D Company, Dept. SA-123
1601 Mercer Road, Lexington, Kentucky

Please send me your latest SAFETY SWITCH BULLETIN

NAME_____

COMPANY_____

ADDRESS_____

CITY_____ ZONE____ STATE_____

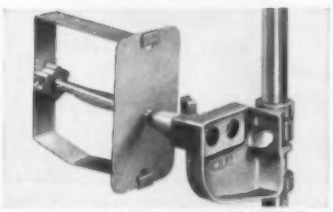
SQUARE D COMPANY

wherever electricity is distributed and controlled

HERE'S HOW TO HANDLE ANY PACKAGE WITH McBRIDE VERSATILE PACKAGE HOLDERS

McBride Bowed Spring Spindle with cone and large package holders can accommodate every type of package used on Over End Take-Off today. Adapters feature the quick change design for instant placement or removal, to **cut down changeover time loss.**

UNIVERSAL CONE HOLDER



LARGE DIAMETER PACKAGE HOLDER

MERCURY SWITCH STOP MOTION

Let McBride study your creel requirements. You will be pleased with the improved efficiency, ease of operation, and rugged design of McBride creels. Creels for warping, weaving, winding, twisting, tufting, and knitting. Special laboratory warping units designed to suit your requirements.

See Us At The ATME
May 23-27. Booths 1203-1152

Complete engineering service is part of every McBride installation

McBRIDE COTTMAN AVE. & WISSINOMING ST.
PHILADELPHIA 35, PENNSYLVANIA

In Canada: Hugh Williams & Co., 27 Wellington St., E. Toronto 1, Ontario

PERSONAL NOTES

(from page 16)

quarters, Quartermaster Research and Engineering Command in Natick, Mass. Col. Wofford will direct research and engineering efforts at the R & E laboratories.

Ely R. Callaway, Jr., E. H. Hines, Jr., and **Raymond E. Kassar** have been elected vice-presidents of Burlington Industries, Inc. * * * **William A. Drissler, Jr.,** has been named executive vice-president of Burlington Hosiery Co., in charge of all men's and children's operations. **Mark N. Holmes** has been appointed assistant vice-president and will continue as director of quality control and research.

George C. Guenther has been elected president and treasurer of the John H. Guenther Hosiery Co., Reading, Pa., and **John H. Guenther, Jr.,** has been named to the newly created post of vice-president and secretary. **John H. Guenther, Sr.,** founder of the firm, has retired, but will retain an active interest in the business.

Don Miller has assumed the presidency of Miller Hosiery Mills, Inc., Concord, N. C., succeeding **J. F. Miller,** who has retired.

The board of directors of E-Z Mills, Inc., New York, N. Y., has announced the election of the following officers: president — **Sherman P. Haight, Jr.;** senior vice-president—**Wilson Haight;** treasurer—**Howard Calvin Sykes, Jr.;** vice-president in charge of manufacturing—**Harold E. Towslee.**

Sherman Haight

C. W. Brown, assistant manager of the Shawmut (Ala.) Mill of West Point Manufacturing Co., has been named manager of the recently acquired Newnan (Ga.) Mill. Other Shawmut supervisors transferred to Newnan are: **Frank Peak,** production manager; **O. L. Edwards,** overseer of carding; and **E. C. Broach,** overseer

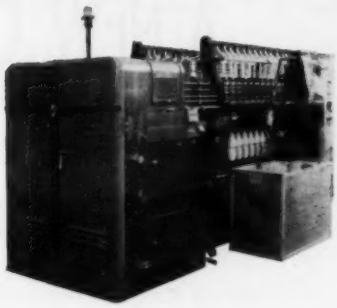
AUTOMATION!

See these Machines in Action
At The
American Textile Machinery Exhibition
Atlantic City, May 23-27, 1960
Booth No. 931 (Lower Level)

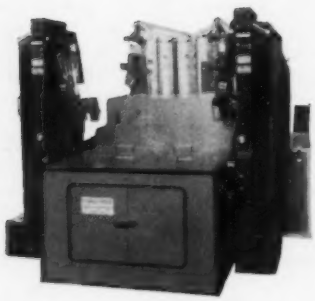
DRAWING THROUGH SPINNING

THE OM-S SPINNING FRAME . . . . . *Eliminates Roving Completely*

This latest model costs less than a conventional frame, but produces a more even and stronger yarn *directly from drawing sliver.* It accommodates cotton and other staples up to 3" in length, spins them into any yarn count from 5's to 120's. Notable innovations include automatic spindle speed regulation; automatic stop and rail lowering motion (with doffing pilot lamp); and increased can and bobbin capacity. More than 1,000,000 spindles in use, including more than 10 installations in the U.S.A. Installed and serviced by reputable erectors in North America.



Head-End of OM-S Spinning Frame with Auto-Doffer in action.



Permanently Mounted Auto-Doffer, with Dual Heads. (Portable models also available.)

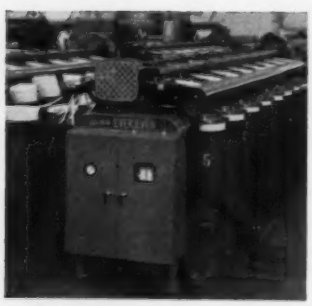
THE AUTO-DOFFER . . . . . *Eliminates Hand-Doffing Completely*

Here, for the first time in this country, is a completely perfected doffing device that totally eliminates the expensive and tedious hand operation of doffing full bobbins and replacing empty ones on spinning or twister frames. Equipped with dual doffing head, travelling along both sides simultaneously up to 25 feet per minute, it can completely doff a full-length frame in less than two minutes! Efficiency, in terms of ends down after doffing, increased as much as 50%.

THE O-M HIGH SPEED DRAWING FRAME · *Accelerates Sliver Production*

New to North America, this machine turns out superior sliver at speeds exceeding 400 feet per minute. As a packaging machine for OM-S spinning creel cans, a new system of automatic can doffing allows for many cans to be handled without human attention. Empty cans are fed into each delivery and full cans are moved away on separate conveyors. Other new features include an improved drafting system, revolutionary suction clearers on all top and bottom rollers, power driven sliver lifting creels, 3 sets of stop motions with separate pilot lamps to pinpoint source of stoppage, and improved systems of sliver cutting and coiling.

O-M High Speed Drawing Frame with New Automatic Can Changing.



Ever-Even Control Box with Recorder. (Mounted on Conventional Drawing Frame)

THE EVER-EVEN . . . . . *Controls Sliver Variables Continuously*

Also new to North America, this automatic feedback control, for drawing frames and pin drafters, continuously measures and integrates the sliver from each delivery and feeds back the results to instantaneously correct the draft in case of unevenness. Evenness measurements, machine stops, and their duration are recorded on charts, so that the quality, efficiency, and production of each machine can be readily determined at any time. Short term variation is substantially reduced and long term variation is practically eliminated, with no gear changing.

In addition we offer a full line of auxiliary spinning equipment and supplies.

Address All Inquiries To: **EDWARD S. RUDNICK, REPRESENTATIVES**
Olympia Bldg., New Bedford, Mass.

Representing in North America:— Mitsui & Co., Ltd. (Exporters-Importers)
Tokyo, New York, etc.
O-M Spinning Machine Manufacturing Co., Ltd.
Osaka, Japan

UNISTEL

Introduces

A NEW CAN DRYER

A sensational new Can Dryer will be exhibited at the show.

The unique feature of the dryer will be that the cans revolve on fixed journals.

Plant engineers will appreciate the simplicity of piping with no rotary joints to maintain and syphon troubles eliminated completely.

Practically every improvement in cans made since 1945 have been made by UNISTEL engineers.

Be sure to examine the Unistel Precision-built Can Dryer with its unique features.

Also see the Unistel Stainless Steel Kettle built by specialists in mixing.

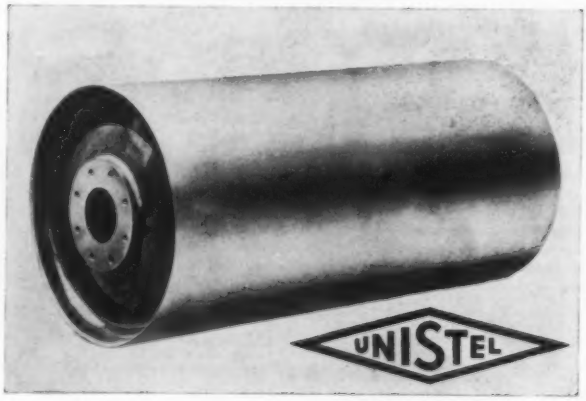
Booth 47 at the A.T.M.A. Exhibition.

UNISTEL

TEXTILE MACHINE CORPORATION

225 WESTCHESTER AVENUE

PORT CHESTER, N.Y.



UNISTEL PRECISION-BUILT DRY CAN

PERSONAL NOTES

(from page 20)

of winding. **Cliff B. Glover,** who was with Newnan Mills before it became a West Point unit, is in charge of standards, cost, and quality control. * * * **Paul D. Emery** has been named assistant manager of the Shawmut Mill succeeding Mr. Brown. Mr. Emery was formerly associated with Dan River Mills, Inc.

Howard P. Derrickson has been named manager of the Baltic (Conn.) Mills Co.

F. C. Grier, formerly treasurer and assistant secretary of Dixie Hardware & Mill Supplies, has joined the purchasing department of Abney Mills, Greenwood, S. C.

As a result of the reorganization of the Proximity plant of Cone Mills Corp., **Raymond D. Kincaid,** former plant superintendent, has been promoted to superintendent of carding, spinning, winding, spooling, warping, and general help. **Robert F. Crews** has been named superintendent of slashing, weaving, cloth room, and production planning. **Mitchel C. Andrew** has assumed duties as overseer of the cloth room, and **Robert E. Barton** has been named assistant overseer of the weaving department.

At the Cedartown, Ga., plant of The Goodyear Tire & Rubber Co., **Ralph Jordan** has been promoted to second shift superintendent. **H. L. Riel,** formerly spinning overseer, has

Mr. Jordan *(upper left)*

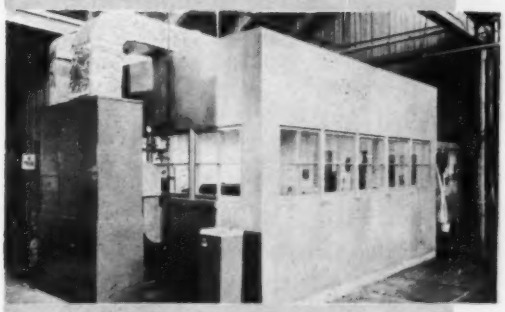
Mr. Riel *(upper right)*

Mr. Wood *(right)*

been made overseer of carding and spinning. **R. E. Wood,** formerly acting second shift superintendent, has been

AIR-PERME-ATOR

Announces 25 years of OUTSTANDING SERVICE to the Textile Industry



Illustrations:

1 — Typical Installation
2 — Testing Laboratory
3 — Cloth Conditioner

For 25 years, Air-Perme-Ator has furnished complete year 'round indoor atmosphere control equipment to the textile industry. Air-Perme-Ator's specialized knowledge of varied mill requirements—vast experience and fabrication skills have ensured the textile industry of the finest atmospheric control equipment obtainable. Fabricated to meet the most exacting of individual mill needs, Air-Perme-Ator units, from the smallest warp conditioner to complete plant installations are designed and precision-fabricated to ensure maximum efficiency, trouble-free operation and optimum economy.

Manufactured under exclusive Kohuts' patents, Air-Perme-Ator units find application in:

- **Cooling**
- **Heating**
- **Humidification**
- **Dehumidification**
- **Air Filtering**
- **Air Washing**

Heating and cooling can be incorporated with the initial installation of humidification or at a later date.

Air-Perme-Ator also manufactures testing cabinets and cloth conditioners.

Write for further information.

AIR-PERME-ATOR MFG. CO.

304 PREAKNESS AVENUE, PATERSON, N. J.

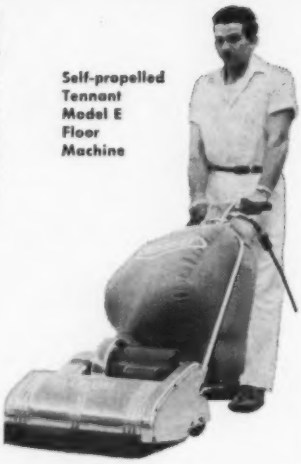
OUR 90th YEAR
TENNANT

The Textile Industry's Most Widely Used

Floor Maintenance System

More than 1000 of America's largest textile mills now save money by using the **complete** TENNANT SYSTEM of floor care . . . consisting of TENNANT Methods, Materials, and Machines.

FOR HEAVY DUTY DRY CLEANING—TENNANT Heavy Duty Model E Floor Machine weighs only 95 lbs., yet cleans a 21" path. Vacuum picks up dust and light soilage. Ideal for both wood and other textile mill floors. 1 hp electric motor. Larger machines also available.



Self-propelled Tennant Model E Floor Machine

Walk-behind Tennant Model 40-E Electric Sweeper

NO FUMES . . . NO NOISE . . . because the compact new Model 40-E Sweeper is also battery-powered. Cleans 34" path, turns in its own tracks. *Sweeps 2 to 5 times faster than a man with a broom, yet does a far cleaner job.* Very powerful brush-and-vacuum system sucks fine dust into 2200 sq. in. filter. Outperforms any other sweeper its size for clean, dust-free work. Low priced. TENNANT Sweepers are also available in gasoline and LP-gas models. Larger rider-type models sweep paths up to 88" wide.

V-Mop, Cleaning Rolls, and a typical Tennant Floor Seal used in the Tennant System

OTHER FLOOR MAINTENANCE AIDS. TENNANT *heavy-duty* **Floor Seals** are easy-to-apply, attractive, long-lasting, non-darkening, take punishing traffic. **Cleaning Cylinders** (many types) on Floor Machine erase dirt, stains, scuff marks, and restore gleaming finish. TENNANT **V-Mop** has exclusive scissors action which allows it to spread to exact width desired . . . from 6" to 57". V-design triples load capacity without spilling. Available in 37" and 57" widths, expanded. **Channel Mop** has 3 removable 10" sections; sweeps 30" path. Weighs only 6 lbs.

PERSONAL CONSULTATION. Your TENNANT Man is a qualified floor expert, ready to analyze your problem and give free estimate of savings possible in *your* mill.

WRITE TODAY *for illustrated bulletins and performance data. Or ask for survey of your floor.* G. H. Tennant Company, 735E N. Lilac Drive, Minneapolis 22, Minnesota.

FLOOR MAINTENANCE SYSTEMS

PERSONAL NOTES

(from page 22)

advanced to junior efficiency engineer.

Charles L. Cohen has been elected president of Opelika Manufacturing Co., succeeding the late Herbert Snower. **Donald P. Cohen** has been elected secretary-treasurer.

Carl J. Seigert, Jr., has been appointed general manager of the

Borg Fabric Division of Amphenol-Borg Electronics Corp.

Daniel Shichman has been appointed manager of fiber engineering research at the U. S. Rubber Company's research center in Wayne, N. J. Mr. Shichman succeeds Boutwell H. Foster who has retired.

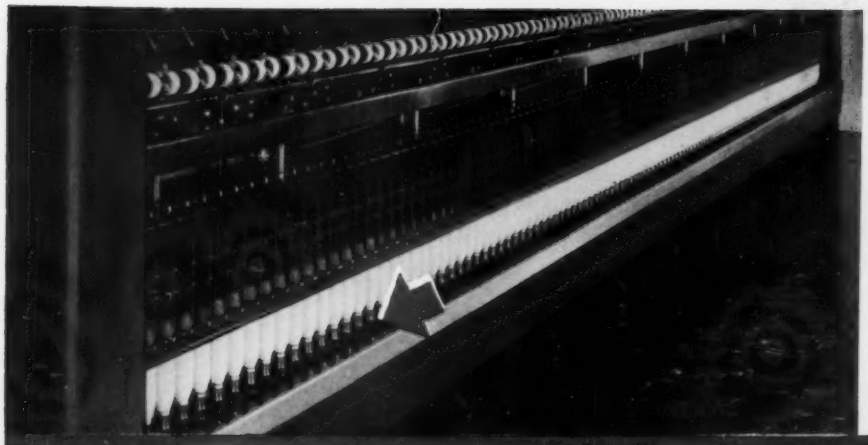
Joseph H. Wright, II, president and general manager of Davenport Hosiery Mills, Chattanooga, Tenn., and **Philip G. Forsythe** and **Rudd E. Hardesty,** each a vice-president of the firm, have been elected vice-presidents of Chadbourn Gotham, Inc.

H. N. Walker, overseer at the Clover, N. C., plant of The American Thread Co., Inc., has been selected by fellow supervisors for the first "Supervisor of the Year" award.

O. K. Shedd has joined Hyde Park Mills, Inc., Covington, Tenn., and is in charge of supply purchasing and maintenance. **Gerald Veazey** has assumed his duties in the engineering department.

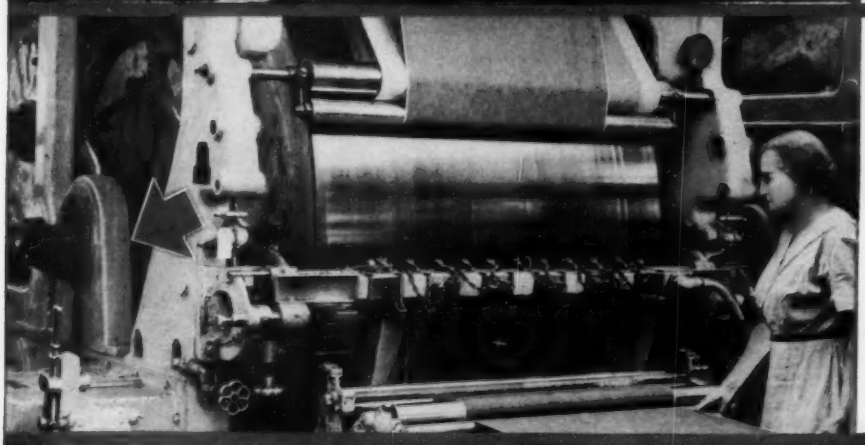
R. X. Maxley has been appointed to the newly created post of executive vice-president and treasurer of Vanette Hosiery Mills, Dallas, Texas. Mr. Maxley will be in charge of production and accounting.

John R. Illingworth has been elected chairman of the board of Greenville (R. I.) Finishing Corp. and



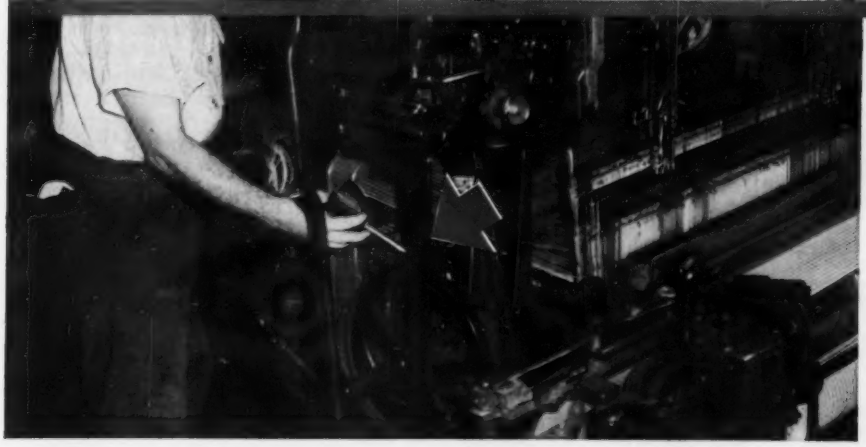
SPINESSO® OIL
assures clean spindles

Specially made for high-speed spindles, assures efficient gum-free operation, provides instant lubrication during critical warm-up periods.



NEBULA® EP
multi-purpose grease

Lubricates steam-heated can bearings and other "hot spots." Stays on the job under high temperatures; provides outstanding extreme pressure lubrication for textile machine-bearings and gears.



EPIC® LUBRICANTS
save oil and time

Frequency of oiling loom parts is reduced because these lubricants stick tightly to metal...reduce stains...save labor.

WEAVING PROFITS WITH ESSO LUBES

Labor, time and machine-saving Esso lubricants like those above can help cut your lube and maintenance bill. Why not investigate the complete line of Esso textile machine lubricants. Contact your local Esso office or write Esso Standard, Division of Humble Oil & Refining Company, 15 West 51st Street, New York 19, New York.

ESSO

In industry after industry..."ESSO RESEARCH works wonders with oil"

Since 1852

FIBRE PROCESSING MACHINERY by SARGENT

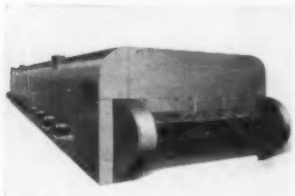
From Bale Opener through Dryer, Sargent's modern fibre processing system gives you completely automatic continuous production . . . an uninterrupted straight-line flow of quality-protected fibres at an economy you cannot afford to overlook. Let us tell you more.

FEEDERS • OPENERS • PICKERS • BLENDERS
WASHERS • DRYERS • TOP & YARN HANDLING
AND SPECIAL PURPOSE MACHINERY

BALE OPENER AND PICKER
Continuous opening, picking and feeding, cotton linters or staple. Excellent on machine-picked cotton.

SQUIRREL CAGE DUSTER
Continuous dusting of heavy grease wools, waste, rags. Also very efficient blender.

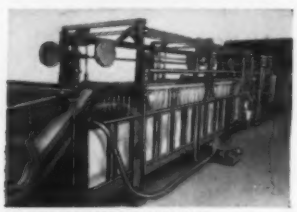
WET AND DRY PICKER
Highly versatile—for fibres after bleaching, after dyeing. Works equally well with wet or dry fibres.



STOCK DRYER
Leads all dryers for performance and dependability on scoured or dyed wools, cotton, synthetics.

MIXING PICKER
For continuous blending—all fibres.

FIBRE PROCESSING SYSTEM
Section of recent installation showing high economy, complete dependability. Fibres are not handled from opening to drying.



STAINLESS STEEL WASHER
For scouring, bleaching, acidifying.

At The Show, ATLANTIC CITY, Booths 470-473

C. G. SARGENT'S SONS CORPORATION
Graniteville, SINCE 1852 Massachusetts

PHILADELPHIA • CINCINNATI • ATLANTA • CHARLOTTE • HOUSTON • CHICAGO • DETROIT • TORONTO

PERSONAL NOTES

(from page 24)

Taunton (Mass.) Dyeing & Print Works. **Richard H. Illingworth** has been named president of the Greenville firm and secretary-treasurer of the Taunton firm. **William A. Illingworth** is president of the Taunton firm and secretary-treasurer of the Greenville firm. **Claude D. Arnaud,** plant manager at Greenville, has been named general manager of both plants.

Carl Buck has been promoted to manager of the newly formed ma-

Mr. Jordan

Mr. Buck

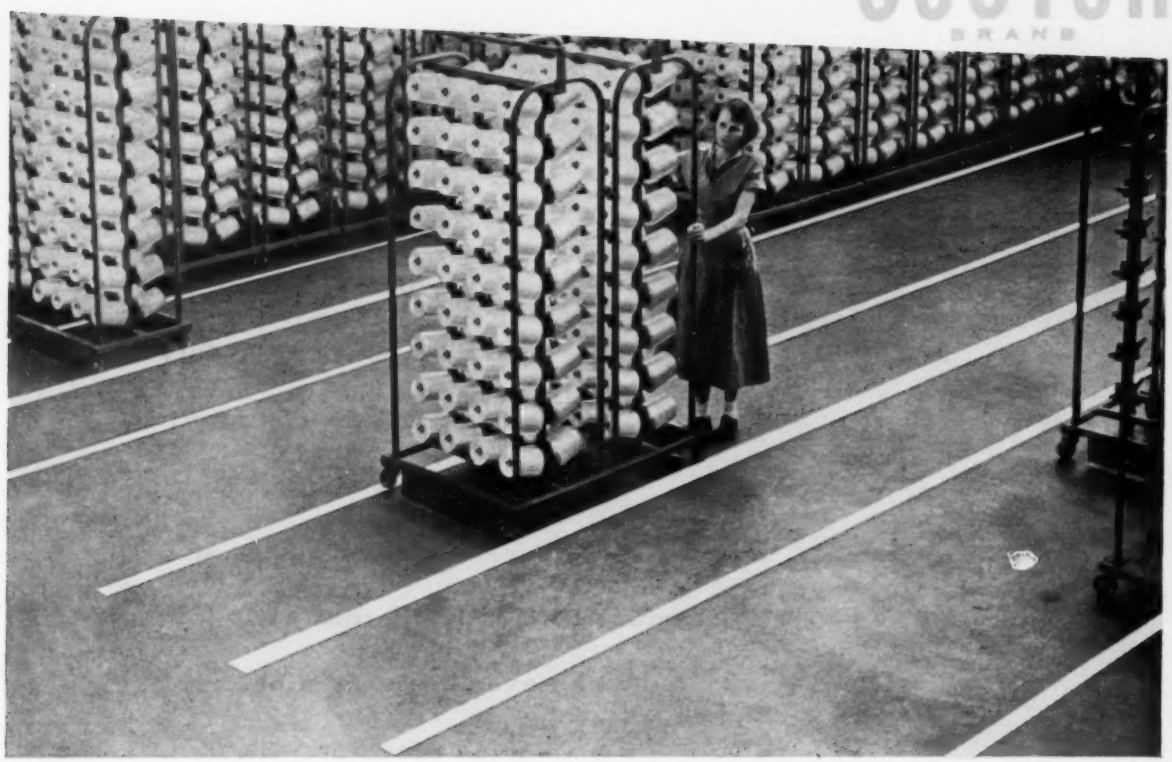
chinery research department of Woodside Mills. **Clyde Jordan** has been named to succeed Mr. Buck as purchasing agent.

F. Springer Foster has been promoted to head of the textile unit of the research and development division of Callaway Mills Co., LaGrange, Ga. * * * **F. Murry Williamson** has been named product development engineer for the products of the Calumet plant, and **Jean Maifeld** has been transferred to the product development division as an assistant.

Dewey L. Daves has been named superintendent of the No. 4 plant of Cannon Mills Co., Kannapolis, N. C. **K. Julian Krider** has succeeded Mr. Daves as superintendent of Plant No. 10 and Brown Manufacturing Co., Concord, N. C. **Jack Chamberlain,** formerly overseer of Plant No. 1, has been promoted to assistant superintendent of Plant 10 and Brown Mfg. * * * **Ralph Hoke, Jr.,** has assumed duties as waste control superintendent, and **Malcolm B. Bishop Jr.,** has succeeded Mr. Hoke as safety director. **George Griggs** has been promoted to secretary to the general manager.

The Spartanburg (S. C.) Kiwanis club recently named **Roger Milliken,** president of the Deering Milliken

Continued on page 30



TAPEnology . . . industry's newest cost-cutting tool

TAPE INSURES RAPID INVENTORY FLOW IN TEXTILE MILL STORAGE AREAS

See how easily and efficiently "SCOTCH" BRAND Lane Marking Tape No. 471 organizes work and storage areas. Sticks at a touch to any clean dry surface. No down time—trucks can roll over it immediately after application.

"SCOTCH" Lane Marking Tape simplifies storage, stock inventory, production and plant traffic problems. Eight vivid colors make designation of storage areas and traffic lanes easy. And "SCOTCH" Lane Marking Tape lasts—wears 5 times as long as conventional materials—is unaffected by most acids, greases, or solvents.

"SCOTCH" Lane Marking Tape is easily applied to concrete, block, tile, or wooden floors by hand or with the "SCOTCH" BRAND Lane Marking Applicator M-77. Put this housekeeping helper to work in your plant.

What's your marking problem? Traffic lanes . . . No Smoking Areas . . . Inventory storage? Ask your nearest "SCOTCH" BRAND Tape Distributor, or write: 3M Company, 900 Bush Avenue, St. Paul 6, Minn.

When tape costs so little, why take less than "SCOTCH" Brand?

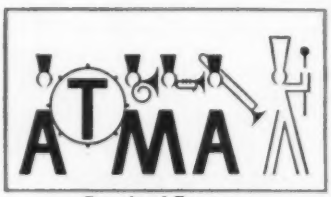
"SCOTCH" IS A REGISTERED TRADEMARK OF 3M CO., ST. PAUL 6, MINN.
EXPORT: 99 PARK AVE., NEW YORK 16. CANADA: LONDON, ONTARIO.

MINNESOTA MINING AND MANUFACTURING COMPANY
. . . WHERE RESEARCH IS THE KEY TO TOMORROW

SCOTCH® BRAND

The 10 outstanding machines which Whitin will exhibit at Atlantic City will have this in common; each will do its specific job better or faster, and more economically than that job has ever been done before. Each machine will show unmistakable evidence of the advanced textile technology, research and engineering which are inherent in all machinery made by ➧ ➧ ➧

The 10 machines listed below will be in operation in Booth 212 at the AMERICAN TEXTILE MACHINERY EXHIBITION-INTERNATIONAL Atlantic City, N. J., May 23-27, 1960



Parade of Progress

WHITIN

PIEDMONT SPINNING **COMMODORE TWISTER** **SUPER LAP MACHINE**
KW AMERICAN SYSTEM SPINNING **AMERICAN WORSTED COMBER**

WHITIN

MACHINE WORKS • Whitinsville, Mass., U.S.A.

CHARLOTTE, N.C. • GREENSBORO, N.C. • ATLANTA, GA.
SPARTANBURG, S.C. • DEXTER, ME.

Sales agents in all principal textile centers

FLEX-SPIN WOOL SPINNING FRAME EVEN-DRAFT DRAWING FRAME
PACEMAKER TWISTER SUPER J COMBER MODEL P ROVING FRAME

DAVIS & FURBER

American Textile Machinery Exhibition - International

VISIT D&F EXHIBITS Telephone Atlantic City 4-3937

ATMA

Parade of Progress

ATLANTIC CITY, U.S.A. MAY 23-27, 1960

JUST INSIDE MAIN ENTRANCE Office and Display

NEW
Model H Ring Spinning Frame

Designed for impressive new strides in Quality and Low Cost Spinning

1 Production with larger packages, higher speeds, less downtime, less floor space, 16 listed Production features.

2 Preventive Maintenance with more sturdy mechanisms and structures, 22 listed 22 listed Preventive Maintenance features.

3 Safety with lowered frame (no more stepboard) and low voltage control circuits.

NEW
Fiber Blending Opener

to prepare stock blends for the Woolen Card.

Built on Sectional Frame Castings for Flexibility of Application
- a) Davis & Furber ruggedness
- b) variety of unit arrangements
- c) T-slot Arch for adjustment and flexibility of Rolls

Three Cylinder Woolen 84" Card

Includes latest Model L refinements developed and proven during the past 10 years. Includes newest controls for continuous balance and check of Quality and Production.

NEW
Sliver Card

Two Cylinder, 60" width, All Metallic Wire Produces SLIVER FOR HIGH PILE KNITTING.

In first installation, comparative mill figures show more than *three times* Production of old Cards replaced on Synthetic Sliver.

NEW
Selectrite Napper

Designed for simplified control and application of energy; Push Button differential variable speed control allows infinite vernier adjustment of energy and registers on tach dials.

D&F Ring Spinning Frame and Three Cylinder Card; Daily Exhibition Operation Schedule; Inquire at D&F exhibit

DAVIS & FURBER
MACHINE COMPANY

TEXTILE MACHINERY DESIGNERS AND MANUFACTURERS

North Andover, Mass.
Charlotte, North Carolina

AD 14-4

Member — American Textile Machinery Association

CARDS • SPINNING FRAMES • PREPARATORY MACHINERY • WARP DRESSING MACHINERY • FINISHING MACHINERY MACHINERY MODERNIZATION • ACCESSORIES, SUPPLIES, CARD & NAPPER CLOTHING, GARNET WIRE, TAPES & APRONS SPARE PARTS • TECHNICAL SERVICE & CONSULTATION

PERSONAL NOTES

(from page 26)

group of textile mills, "1959 citizen of the year."

Norman L. Seltzer has been named manager of product research for the textile division of The Kendall Company.

William Astle, office manager and assistant to the general manager of Firestone Textiles, Ltd., has been

Mr. Austin (right) congratulates Mr. Astle.

named general manager of the Woodstock, Ontario, plant. Mr. Astle succeeds **Frank A. Austin** who has retired.

E. B. Shaw, formerly executive vice-president, has been appointed president of The American Thread Co., Inc., succeeding **P. S. Howe, Jr.,** who has been elected chairman of the board of directors. **H. E. Williams** has been named vice-president and a director, and **H. L. Crispen, Jr.,** has been advanced to controller.

Ansonia Mills has announced the appointment of **Thomas F. Coughlin** as director of marketing and research.

OBITUARIES

Calvin Brooks Bennett, assistant treasurer and manager of Standard-Coosa-Thatcher's roving yarn division, Piedmont, Ala.

George W. Borg, 71, retired president of Borg-Amphenol Corp., Delavan, Wis.

Charles G. Buie, 54, vice-president and general manager of Aileen Mills, Biscoe, N. C.

Bert S. Dutcher, 80, president of Jersild Knitting Co., Neenah, Wis.

Joseph S. Ehrman, 67, retired former owner and president of the Blue Star Knitting Co., Milwaukee, Wis.

George S. Grayson, 73, retired, formerly associated with Grayson Mills, Philadelphia, Pa.

Ralph Dennison Keeney, Sr., 78,

Continued on page 34

The ALDRICH

Synchronized Single Process

Picker...

A BIG HELP TO BETTER YARN

In a modern mill with few doublings and long drafts, the picker lap is the foundation on which everything else rests.

THE ALDRICH SYNCHRONIZED SINGLE PROCESS PICKER

makes a lap out of a lap instead of from a box full of loose, irregularly lumped cotton. This principle of making the lap out of a well felted lap assures more uniform inch-by-inch weight in the finished lap, and more uniform sliver, roving and yarn.

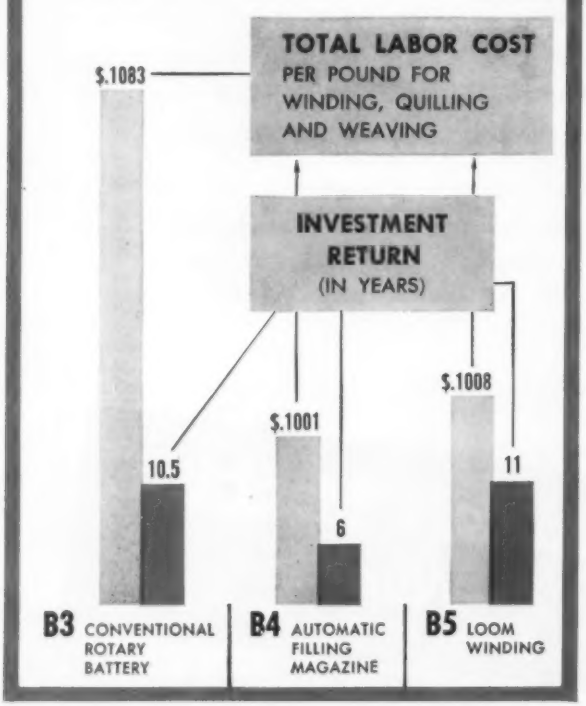
The Aldrich Lap Weight Indicator tests the lap as it is made and helps to get that great inch-by-inch uniformity which makes a really good lap.

AldricH MachinE WorkS

Greenwood, South Carolina

ATMA Parade of Progress

ONE OF MANY EXAMPLES: 15's average count, using 4.5 lbs. cone



THE MOST ECONOMICAL FILLING PREPARATION NOW AVAILABLE... WITH

Schlafhorst SERVOLOOM AUTOCOPSER

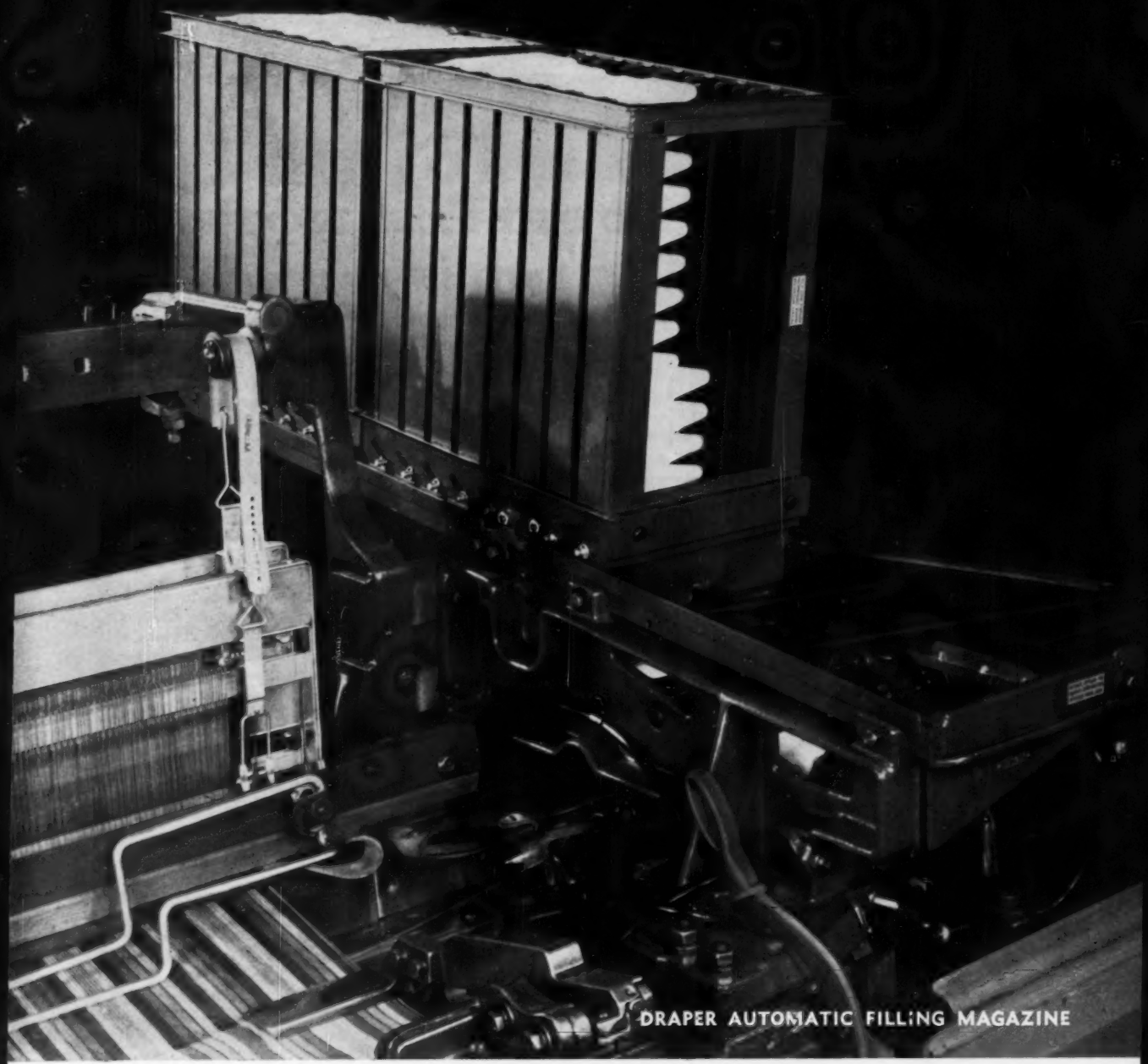
LOADING DRAPER AUTOMATIC FILLING MAGAZINE

Call your nearest Terrell sales engineer for more examples and information, and investigate this new approach to mill automation at the International Textile Exposition.

THE

TERRELL

MACHINE COMPANY, INCORPORATED
CHARLOTTE, N. C., U. S. A.



INCREASE ***loom performance***

IMPROVE ***cloth quality***

REDUCE ***mill costs***

The Draper Automatic Filling Magazine, *brings new automation to your weave room . . .* reduces filling handling to a minimum.

Lower labor costs, more continuous loom operation, cleaner yarns and fewer cloth seconds are direct advantages gained from the use of this magazine.

Your Draper representative will be glad to show you the many benefits that can be obtained from the Draper Automatic Filling Magazine.

DRAPER CORPORATION

HOPEDALE, MASS.

ATLANTA, GA. GREENSBORO, N.C. SPARTANBURG, S.C.

ATMA Parade of Progress...

OBITUARIES

(from page 30)

president of Somerville Manufacturing Co., Somers, Conn.

William H. Marland, 85, president of the former Sanford Mills and Goodall Worsted Co., Sanford, Me.

Avery W. McMurry, 87, former secretary and general manager of Belmont Cotton Mill, Shelby, N. C.

Edward W. Naylor, Sr., 63, manager of the cotton department of Carlton Yarn Mills, Cherryville, N. C.

William Curtis DeWitt, foreman of the corduroy department of Union Bleachery, Greenville, S. C.

Karl Robbins, 67, former owner of Robbins Mills, Inc., Robins, N. C.

Stephen I. Rudo, 63, director of research and development of Werner Textile Consultants, New York, N. Y.

Walter J. Sullivan, 62, a technical salesman for the dyestuffs division of E. I. du Pont de Nemours & Co., Inc., Wilmington, Delaware.

William M. Weaver, Jr., 65, head of the purchasing department of the Bibb Manufacturing Co., Macon, Ga.

Robert L. Williams, representative for Southern States Equipment Corp. in North Carolina and Virginia, Hampton, Ga.

SUPPLIER NOTES

The Industrial and General Products divisions of **Allis-Chalmers Manufacturing Co.** have been combined into a new operating unit designated the Industrial Equipment Division. W. M. Wallace, a vice-president, has been named general manager, and G. A. Saar has been appointed assistant general manager. M. M. York has been assigned to the position of manager of marketing. * * * Canadian Allis-Chalmers, formerly a part of the Industrial Equipment division, will operate as a separate division of the Industries Group. H. M. Schudt, president, has been named general manager.

Quittman M. Rhodes has been appointed sales manager, and Clyde N. Whitesides has been named southern district manager for the textile chemicals department of **American Cyanamid Co.** * * * James N. McDonald has been named manager of commercial development for the fibers division.

A new display room in the general offices of **Armstrong Cork Co.** is designed to provide visitors and employees with a better understanding of the products and operations of the industrial division. Several of the products manufactured for the

JACOBS TIGER PAW®

U. S. PAT. NO. 688,559

VIBRATION PADS

VACUUM SUCTION CUPS really hold, not affected by oil, greases, or floor finishes. No messy adhesives!

THESE TIGER PAW VIBRATION PADS are one of the easiest ways in the world to reduce plant operating costs.

See for yourself, AT NO COST. Send for FREE SAMPLES TODAY!

● Fiberglas & Vinyl — the Modern Way

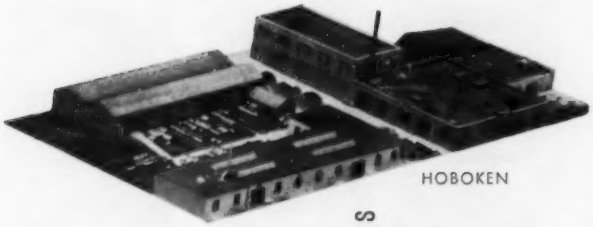
● Reduces Vibration over 90%

The Bullard Clark Company

SOUTHERN Division Charlotte, N. C.

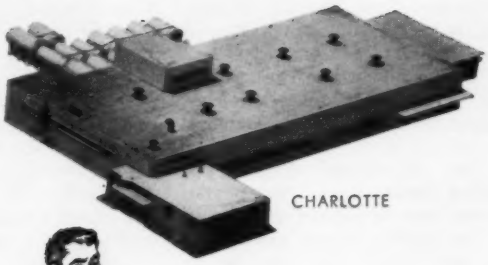
JACOBS

NORTHERN Division Danielson, Conn.



HOBOKEN

for more than 35 years



CHARLOTTE

STANDARD

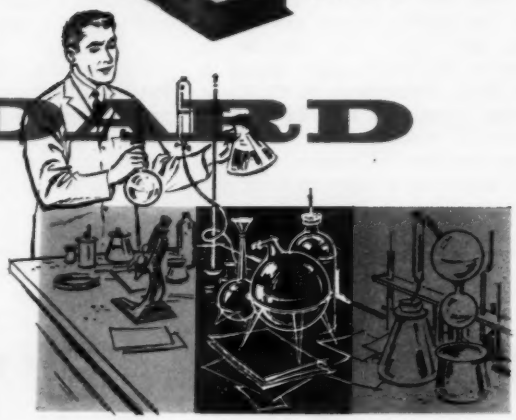
specialists in

TEXTILE OILS

TEXTILE FINISHES

TEXTILE SPECIALITIES

SPECIALISTS IN TEXTILE FINISHES TEXTILE OILS TEXTILE SPECIALITIES



STANTEX OILS IMPROVE YOUR KNITTING

For better stitch formation, more uniform lengths, and upgrading your fabric quality, insist on your throwster preparing your yarns with Stantex Coning Oils. They are mill proven and give excellent results on—

- **STRETCH NYLON**
- **LEOTARD YARNS**
- **LADIES' HOSIERY YARNS**
- **HALF HOSE YARNS**
- **LACE YARNS**
- • • **SAABA OUTERWEAR YARNS**
- **SWEATER YARNS**
- **TEXTURED OUTERWEAR YARNS**
- **DACRON WEAVING YARNS**
- **COMBINATION YARNS**
- **PRE-SHRUNK SEAMLESS WELT YARNS**

Standard has a special Stantex Oil for each of these constructions, plus know-how technical service. Let us supply you with complete information.

STANDARD CHEMICAL PRODUCTS INC.

HOBOKEN, N. J. • CHARLOTTE, N. C.

SUPPLIER NOTES

(from page 34)

textile industry are demonstrated on a small textile spinning machine which can be operated by visitors.

O. Douglas Schumann has been appointed marketing group manager in the fiber department of **Air Reduction Chemical Co.**, a division of Air Reduction Co., Inc. Mr. Schumann is responsible for developing industrial applications for vinal polyvinyl alcohol fiber. Donald Hawkes Spitzli, formerly with Linen Thread Co., and Edmund J. Gernt, who had been associated with The Chemstrand Corp., have joined the consulting staff of the fiber department.

In the marketing division of **American Enka Corp.**, M. Boylan Carr has been appointed director of sales for textile rayon and nylon yarns. Mr. Carr will also be in charge of the district sales offices in New York, Greensboro, N. C., Chattanooga, Tenn., and Providence, R. I. Claude S. Ramsey, Jr., has been named director of market development, supervising merchandising and advertising programs. T. Redmond Thayer has accepted the position of director of sales for tire and industrial yarns and rayon staple fiber.

Mr. Schumann
Air Reduction

Mr. Carr
American Enka

Mr. Thayer
American Enka

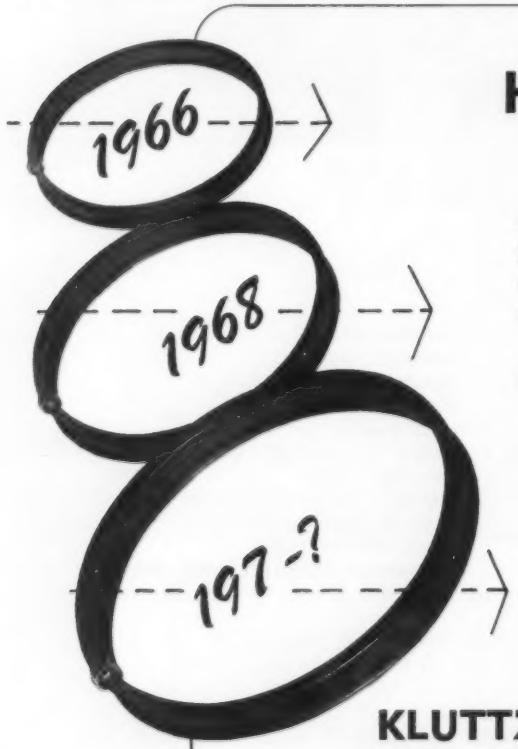
Mr. Farish
Batson

John O. Farish has joined the sales and engineering staff of **Louis P. Batson Co.** Mr. Farish, who had been associated with Burlington Industries, will contact customers in eastern North Carolina, eastern Virginia, and eastern South Carolina.

The benefits afforded by the U. S. Patent Office in the development of products for the textile industry was the theme of an **Arnold, Hoffman & Co.** display, one of the featured attractions at the Chemicals and Synthetics exhibit, sponsored in Washington, D. C., during the month of March by the U. S. Department of Commerce.

The Baxter Corp. has announced the acquisition of a new and larger plant in Shelby, N. C. All operations and personnel from the Grover, N. C., plant will be moved to the new plant by June 1.

The organization of **Continental Industries, Inc.**, a Greenville, S. C., firm specializing in the precision manufacture of metal parts, has been announced by A. Raymond Andrews, president. Located on Farr's Bridge Rd., the firm's service to ma-



How Long Will a Lubri-Cased Ring* Last?

Kluttz Lubri-Cased Rings have been in service over three years and none has yet been turned. Few show signs of serious wear. And . . . because Lubri-Casing protects the exposed lower portion of the ring against rust and corrosion . . . you are assured at least double that service from every Kluttz Lubri-Cased Ring and probably many years more.

Long ring life is only one of this ring's many advantages. Higher spindle speeds, full speed break-ins and longer traveler life give higher production and make the Kluttz Lubri-Cased Ring supreme in the field.

And they cost no more than ordinary rings.

As shown at Booth 754 ATMA Exhibition Atlantic City, May 23-27

*Trade Name—Patented

KLUTTZ RINGS, INC. Gastonia, N. C.

Representatives: Thomas H. Watson, Maiden, N. C. • Hugh K. Smith, West Point, Ga.

Only Emulsifiable A-C® Polyethylene can create "Wash-and-Wear" finishes that... ★ Keep whites white ★ Do not retain chlorine ★ Resist scorching ★ Improve crease resistance

Now—and for the first time—*permanent* finishes for wash-and-wears are available that keep whites *white*, are nonchlorine-retentive, resist scorching at elevated temperatures, and add a new measure of crease resistance.

Already widely accepted by the textile industry, the new emulsions containing A-C Polyethylene benefit every type of synthetic and natural fiber in some way over other finishes. A-C Polyethylene improves "hand"—and in many cases the tear strength of the A-C Polyethylene-finished material is superior to the untreated fabrics.

In addition to better "hand" and tear strength, A-C Polyethylene-formulated finishes improve crease and abrasion resistance and improve sewability; lightfastness or dye shades are not affected.

Write today for more information. Why not find out right now about this new advance in textile finishing? Your textile chemical supplier either has an A-C Polyethylene finish on hand or can formulate one for your specific needs. (We are manufacturers of resins, not finishing emulsions.) Or write to us direct for complete information.

Allied Chemical

SEMET-SOLVAY PETROCHEMICAL DIVISION
Dept. 573-AW, 40 Rector Street
New York 6, N. Y.
National Distribution
Warehousing in Principal Cities

See it at Booth No. 288

THIS IS THE PAD USED TO INSTALL EVERY KNOWN MAKE OF TEXTILE MACHINE

Air-Loc

Special vinyl GRIP surface holds looms, etc. to floors without bolts or cement. **Air-Loc** mounts can be re-used when you move machines. Cost to install a machine goes down when you use the easy **Air-Loc** method.

Try this on a few machines to start, prove this method in your own mill.

• Write for Bulletin B or order direct from:
Yeoman's Textile Machinery Co., Spartanburg, S.C.
American Supply Company, Central Falls, R.I.
H. F. Products Company, Verdun, Montreal, Quebec

MANUFACTURED AND GUARANTEED BY

Air-Loc DIVISION

Clark-Cutler-McDermott Co.
106 WEST CENTRAL STREET • FRANKLIN, MASS.

SUPPLIER NOTES

(from page 36)

chine parts users includes all phases of manufacture such as design, wood and metal patternmaking, machining of castings, and precision finishing on a quantity production basis.

Corn Products Sales Co. has announced the formation of a new Corn Products Division. District office headquarters are located in Greenville, S. C. J. Alden Simpson has been appointed district manager. W. Rouse Joyner continues in charge of the Greensboro, N. C., office which has become a part of the Greenville district.

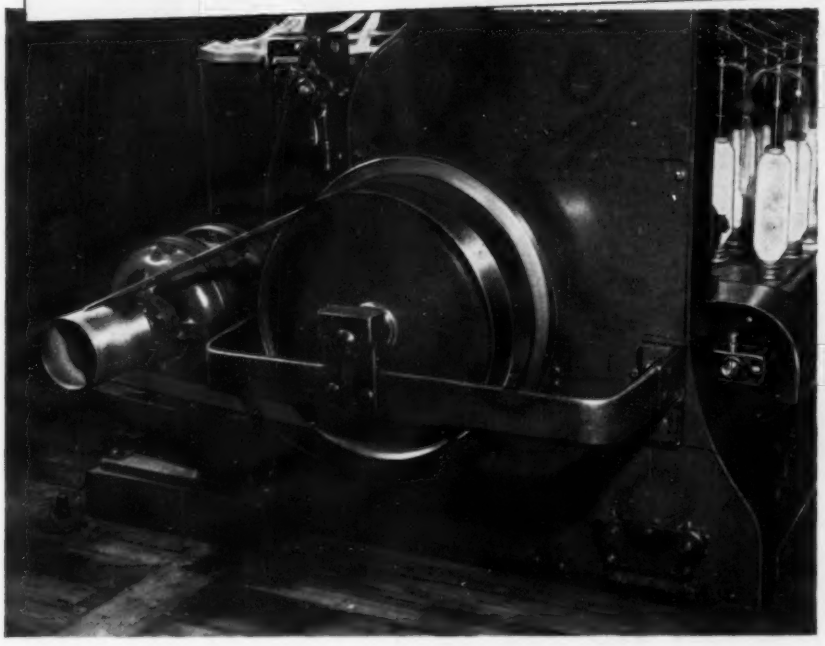
Representatives of **Bijur Lubricating Corp.** will have headquarters in the Chalfonte-Haddon Hall hotel, Atlantic City, N. J., during the American Textile Machinery Exhibition-International. Textile industry personnel are welcome for consultations on machinery lubrication problems. Representing the company will be W. E. Durnam, general manager; F. M. Hewitt, sales manager; H. J. Auten, southern sales engineer; A. S. Cherevko, New England sales engineer.

A new chemical company, **Dixon Southern Chemicals, Inc.,** has been formed by Dixon Chemical and Research, Inc., and Southern Starch Industries, Inc. The plant will be located in Plymouth, N. C., and plans call for production of 80,000 tons of industrial starch a year.

The Dow Chemical Co. has named Ted W. Palmer product manager to handle the sales programming of Versene chelating agents and Separan flocculants. • • • John L. Steen has been assigned to the sales staff of the textile fibers office at Camden, N. J.

Food Machinery and Chemical Corp. has named D. Stewart Quern to the newly created post of senior sales coordinator in the southern territory for the chemicals division. Mr. Quern will work with all of the chemical divisions of the company and will continue to be headquartered in Charlotte, N. C. • • • The former Westvaco divisions are now known as the Chlor-Alkali and Mineral Products divisions of the corporation, and products of the two divisions will be known as FMC Chemicals.

AT THE TEXTILE MACHINERY SHOW . . .



THE OUTSTANDING QUALITIES OF EXTREMULTUS BELTING WILL BE DEMONSTRATED AT BOOTH 388

SEE HOW

EXTREMULTUS

BELTING CAN IMPROVE YOUR PRODUCTION

Be sure you see EXTREMULTUS belting demonstrated at the show. This truly modern belt drive . . . proven in hundreds of textile mills . . . will eliminate stretch, stop slippage . . . can reduce your belt maintenance costs . . . improve machinery efficiency on cards, roving frames, twisters, winders and looms. See for yourself how this amazing belt can increase production at your mill.

SEE EXTREMULTUS AT BOOTH 388

EXTREMULTUS, Inc.

25-11 40th Ave.
Long Island City 1, N. Y.

SUPPLIER NOTES

(from page 38)

Edward C. Connor has been elected president of **Foster Machine Co.,** succeeding W. C. Chisholm, who **has retired.**

Samuel B. Lippincott has been named manager of the fibers division of **Chemore Corp.,** general representatives in the U. S. and Canada of Montecatini Soc. Gen., Milan, Italy. Mr. Lippincott is responsible for the marketing and commercial development, in the U. S., of Montecatini's new polypropylene fiber, "Meraklon."

Mr. Lippincott
Chemore

Mr. Paulsen
Coastal

Mr. Hannan
Fairtex

Mr. Hall
Franklin Process

Grover C. Paulsen, Jr., has been appointed vice-president and technical director of **Coastal Chemical Co.,** Savannah, Ga. Mr. Paulsen will be responsible for product quality control and development of new products and will act as consultant engineer for all types of industrial cleaning.

Jack W. Hannan has joined the **Fairtex Corp.** as a sales agent in Detroit, Mich. He will assume responsibility for coordinating and promoting the automotive applications with foil or metalized Mylar yarns, butyrate metallic yarns, and other products now under development.

Full color advertising inserts in textile publications will make up the 1960 promotional schedule of **Franklin Process Co.,** division of Indian Head Mills, Inc. Live models will be featured in illustrations for the first time in the history of the company. * * * Harold B. Hall, assistant manager of the Philadelphia plant, has been advanced to the sales staff covering metropolitan Philadelphia, northern Pennsylvania, New York state, New Jersey, Delaware, and Maryland.

With the introduction of a complete line of electric, mechanical, and electronic adjustable speed drives available from the Direct Current Motor and Generator Department of **General Electric Co.,** the firm is now offering users of industrial drive systems an engineering service. A company spokesman said, "We are able to survey the user's functional requirements and assist him in making an unbiased selection of the drive system that satisfies these requirements, yet it will be the most economical."

George T. Wingate has been appointed senior sales representative to the chemical division of **The Goodyear Tire & Rubber Co.** Mr. Wingate has been assigned to the Philadelphia district and will primarily cover the Washington, D. C., and Baltimore

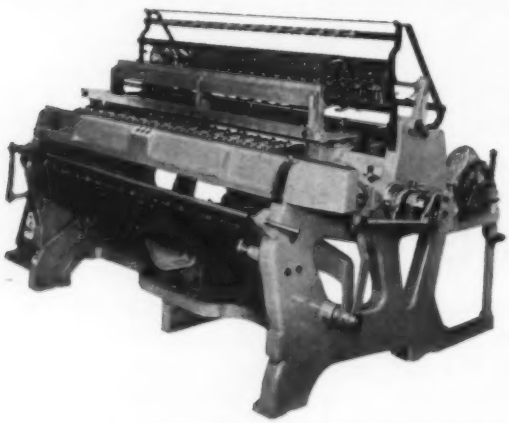
Want to expand production . . . cut your costs?

VISIT BOOTHS NO. 1101, 1102, 1000, 1001 AND 1002 AT ATLANTIC-CITY

See the newest in FAST AUTOMATIC NARROW FABRICS SHUTTLELESS LOOMS

THE ULTRATEX LOOM

16 HEADS 800 R.P.M. 100% AUTOMATIC



A Newcomer in the Big Family of the Texnovo Shuttleless Looms with Stationary Weft Supply

16 HEADS

This new loom has 16 patented needle weaving units for the weaving of such products as:

(a) rigid tapes and ribbons in cotton (e.g. zipper tapes) or in rayon, silk, nylon, etc., for the most various uses up to the maximum width of 1".

(b) elastic webs in cotton, rayon, silk, nylon, for underwear, haberdashery, millinery and the most various uses up to the maximum width of 1" 1/2, wider therefore than the maximum rigid tapes obtainable and this by applying a special device.

800 R.P.M.

The speed of this new loom is 800 r.p.m., i.e. 26,000 single picks a minute for all the 16 heads.

100% AUTOMATIC

This new loom is 100% automatic since equipped with electric warp and weft stop motion. Therefore a single woman weaver can easily attend at least 10 ULTRATEX machines reaching the tremendous production of 260,000 single picks a minute.

The built-in cam box, entirely designed and constructed by TEXNOVO is of the type with interchangeable cams and allows use of 12 shafts, which can carry out all patterns involving repeat 1 : 8.

At the forthcoming American Textile Machinery Exhibition held at Atlantic City, May 23rd to May 27th, 1960, we will be exhibiting under the name of Texnovo the three following machines on Stands No. 1101, 1102, 1000, 1001 and 1002.

No. 1. A 16-space Ultratex Shuttleless Loom producing zipper tapes.

No. 2. A 16-space Ultratex Shuttleless Loom producing elastic underwear webs.

No. 3. A traditional Texnovo Shuttleless Loom with standard Bobbin Weaving Unit producing elastic corset fabrics more than 6" wide.

Visit us at ATLANTIC CITY or apply now to: TEXNOVO S.p.A.—Via Revere 8—MILAN (Italy)

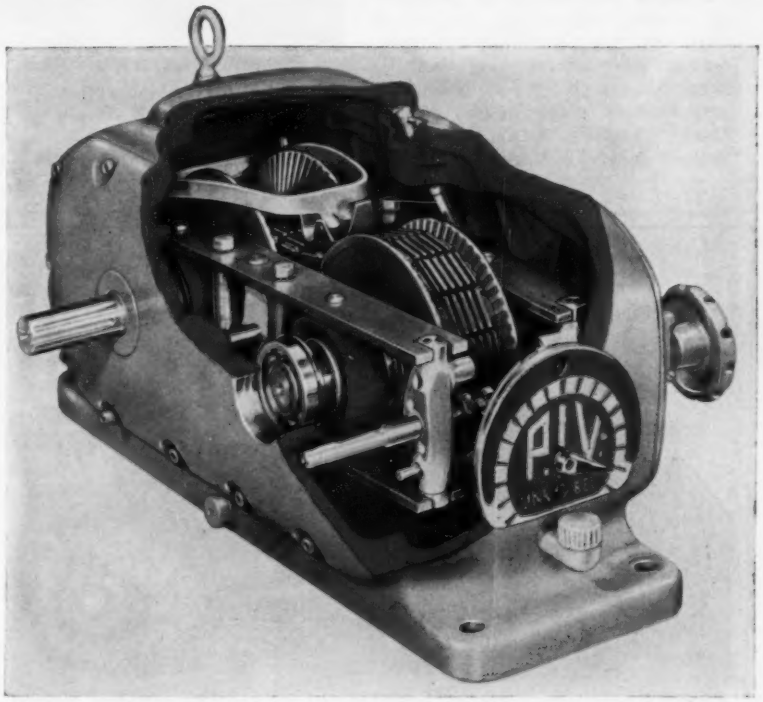
LINK-BELT P.I.V. means positive, infinitely variable speed control

Where modern production machines and operations demand extremely accurate transmission of power with variable speed control, no other variable speed drive can match the efficiency of the Link-Belt P.I.V. Here's how it works.

Because it employs an exclusive metal, self-tooth-forming chain, Link-Belt P.I.V. permits instant and accurate speed changing without perceptible loss of speed—regardless of load. And the variation can be accomplished without stopping the driven machine.

A mere turn of the control screw simultaneously varies effective diameters of conical wheels located on the input and output shafts. In turn, these radially grooved wheels mesh with the self-tooth-forming chain assuring positive selection of speed.

Call your nearby L-B office or authorized stock-carrying distributor for Book 2274.

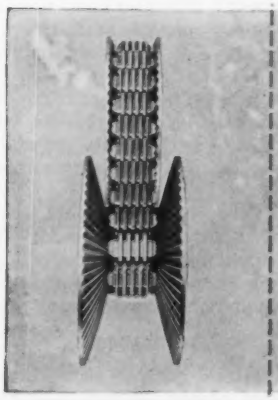


LINK-BELT COMPANY: Executive Offices, Prudential Plaza, Chicago 1. To Serve Industry There Are Link-Belt Plants, District Sales Offices, Warehouses and Stock Carrying Distributors in All Principal Cities. Export Office: New York 7; Canada, Scarboro (Toronto 13); Australia, Marrickville (Sydney), N.S.W.; South Africa, Springs. Representatives Throughout the World.

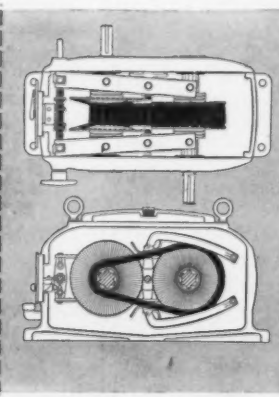
54.318

LONG-LIFE ACCURACY and application flexibility of Link-Belt P.I.V. are unmatched by any other variable speed drive. It's available in 8 sizes and 16 standard types, in capacities from ½ to 25 hp—for horizontal or vertical mounting. Compact design simplifies installation as a separate unit or a built-in part of a machine. Even greater application flexibility can be gained by making motor and helical gear sets integral parts of the P.I.V. Of all-metal construction, P.I.V. is totally enclosed, automatically lubricated.

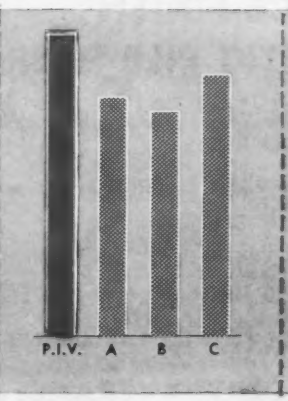
How LINK-BELT P.I.V. differs from other variable speed drives



POSITIVE MESH of self tooth-forming chain with grooved wheels assures full-rated hp at output shaft. All-metal construction . . .



PREVENTS SLIPPAGE because the P.I.V. drive chain does not depend on friction and is unaffected by atmospheric conditions.



UNMATCHED ACCURACY is demonstrated by this actual comparison of maintained rpm of P.I.V. and three other variable speed drives.

GREATER COMPACTNESS results from short-center arrangement of drive mechanism. Some P.I.V. models save 50% on floor space.

SUPPLIER NOTES

(from page 40)

areas for the line of synthetic rubbers, latices, plastics, and chemicals.

Ramsey Products Corp., producer of chains, sprockets, and chain couplings, has completed the transfer of all manufacturing facilities from Albany, N. Y., to their new and modern plant located at 724 Gesco, Charlotte, N. C. J. B. Goodgame is general manager.

Ramsey Products Corporation's new plant in Charlotte, N. C.

Ralph Gossett and Co. has been appointed sales representative for the following: **Wright Plastics Co.,** manufacturers of polyethylene bags, in South Carolina, North Carolina, and Virginia; **Dee's Latex, Adhesives and Chemicals Co.,** manufacturers of latex and adhesive compounds, in South Carolina, North Carolina, and Virginia; **L. Sonneborn Sons, Inc.,** manufacturers of oils and chemicals for processing and finishing, in Georgia, Alabama, and Tennessee; and **Rhodia, Inc.,** manufacturers of polyvinyl chloride staple fibers and filament yarns, for the southeastern area.

Photographic textile engraving equipment has been installed at **Greenville (S. C.) Engravers, Inc.,** an affiliate of Charlotte (N. C.) Engravers, Inc.

The **Guard Chemical Co.,** formerly Gallowhur Chemical Corp., has appointed **Vikon Chemical Co.,** Elon College, N. C., exclusive sales agents in the southern states for the "Puratized" lines of chemicals for the textile industry.

Walter H. Hindle has announced the formation of a consulting company to serve the chemical and textile industries. The new company, **Walter H. Hindle, Inc.,** is located at 420 E. 55th St., New York 22, N. Y.

James Hunter, Inc., has announced the delivery of the first hydraulic baling press manufactured by the company since its recent acquisition of the J. T. Beaty Machine Co. In addition to manufacturing the equipment formerly produced by the latter company, the firm will maintain parts and service facilities for their customers.

Walter A. St. Clair, formerly assistant sales manager of the industrial truck division of **Hyster Co.,** has been appointed sales manager of that division.

The eastern general sales office, paper and export division, and the east coast laboratories of **The Kelco Co.** have been moved into a modern one-story brick building on Terminal Avenue in Clark, N. J.

LUSTERS, SOFTENS AND UP GRADES ALL WOOLEN FACE FINISH AND SYNTHETIC PILE FABRICS

1. Has special slatted cylinder for fine woolens, cashmeres and high priced blends.
2. Special deep groove cylinder for other grade woolens and deep pile fabrics.
3. Can handle up to 70" fabrics.
4. Heat to 400°F within 30 minutes.

ATMA SHOW ATLANTIC CITY SPACE 1318 AND 1420 LOWER LEVEL

HEINZ HERGERT • FRANKFURT-M

MASCHINEN - UND APPARATEBAU

EXCLUSIVE IMPORTER FOR U.S.A. AND CANADA:

WOOLART MILLS, 419 PARK AVE. SOUTH, N. Y., N. Y.

MU 9-3970

Eastman now offers textile finishers 3 basic types of polyethylene

New EPOLENE resins enable textile chemists to formulate broader range of softeners

The wide range of properties now available in Eastman's Epolene series provides greater flexibility in formulating polyethylene emulsions for softening "wash and wear" cottons and synthetics, and for textile lubricants and sizes.

Permanent, low in color, non-chlorine retentive and easy to prepare, emulsions based on Epolene polyethylene give you a practical and economical method for improving the hand, abrasion resistance and tear resistance of "wash and wear" treated fabrics.

With Epolene, you can prepare any kind of emulsion system, cationic, anionic or non-ionic, with solids contents of up to 40%.

Choose from three different low-molecular-weight resins to obtain the right emulsion properties and finishing characteristics for your equipment and service.

Epolene E is the highest-molecular-weight resin of the three. It produces stable, low-color emulsion systems of superior quality for use in softening cottons or synthetics, or as a lubricant to reduce needle-cutting and increase sewability. Like other Epolene resins, it needs no curing, lasts through repeated launderings and resists dirt pick-up and redeposition.

Epolene LVE, a new resin type, has a lower melt viscosity than has Epolene E, thus offering somewhat better handling characteristics. Epolene LVE is softer than other resins in the series. The stability of its emulsions in the presence of resin catalysts is outstanding, especially at the low end of the pH scale, as indicated by its relatively high HLB factor.

Epolene HDE is the first high-density, emulsifiable low-molecular-weight polyethylene on the market. Because it is much harder, it improves significantly the abrasion resistance and tear resistance in cotton and cotton blends. Its stability and permanence are excellent. It, too, offers easier handling characteristics during emulsion preparation because of its low melt viscosity.

If you are formulating polyethylene softeners and would like to produce stable, economical emulsion systems of superior all-'round characteristics, look to Epolene from Eastman. Let us introduce you, also, to new time-saving and cost-cutting emulsifying techniques developed at our textile laboratories. For more information on the formulating and performance advantages of these superior polyethylene resins or for specific formulating assistance, write your nearest Eastman office. We invite your inquiry.

Property	Epolene E	Epolene LVE	Epolene HDE
Molecular Weight	2500	1500	1500
Density	0.938	0.939	0.956
Ring and Ball Softening Point, °C. (ASTM D-36-26)	104-108	104-105	110-111
Penetration Hardness (100 g./5 sec./77°F., tenths of mm.)	2	5	1
Color (liquid), Gardner scale, max.	2	2	2
Brookfield Viscosity (cps. @ 120°C.)	1500	400	455

Epolene

EASTMAN low-molecular-weight polyethylene resins

SALES OFFICES: Eastman Chemical Products, Inc., Kingsport, Tennessee; Atlanta; Chicago; Cincinnati; Cleveland; Detroit; Framingham, Massachusetts; Greensboro, North Carolina; Houston; New York City; Philadelphia; St. Louis. **West Coast: Wilson Meyer Co.,** San Francisco; Los Angeles; Portland; Salt Lake City; Seattle.

Booth MICR-O-GRIND*

the proven flexible card clothing

Overseer of Carding in a S. C. Weaving Mill reports fewer neps and extended stripping cycles:

"We had to run some poor cotton. We tried 8 cards on the Micr-O-Grind needlepoint and immediately noticed a definite improvement in nep count. Cards ran twice as long between grindings. We have now converted all our cards to Micr-O-Grind."

A Superintendent of a Non-Woven Synthetic Mill reports:

"We're carding up to 22 lbs. per hour and our web looks better than ever. We've been able to take off the fancies on most of these cards."

Quality Control Engineer reports:

"Ends down per thousand spindle hours reduced 10%-15%."

Mill Owner reports:

"Four-way savings from Micr-O-Grind system. We grind the cards only four times a year, and then only for an hour. That adds up to about 2,000 lbs. increased production per card per year with a substantial labor saving to boot. We pay no more for Booth Micr-O-Grind than for conventional clothing."

A Booth representative can help you achieve the best in carding performance.

SEE US AT THE ATMA SHOW • EXHIBIT #390-91

*PATENTED

QUALITY CARD CLOTHING SINCE 1892

BENJAMIN BOOTH COMPANY

ALLEGHENY & JANNEY STS., PHILA. 34, PA.

Booth

Sales Offices: Charlotte, N.C.—Richard Hurley • Philadelphia, Pa.—Norman F. Bush—REgent 9-8989 Greenville, S.C.—Hurley & Harrison • West Point, Ga.—Charles G. Stover • Lowell, Mass.—William Gill

SUPPLIER NOTES

(from page 42)

Howard M. Sprock, Jr., has been appointed a market development representative for **B. F. Goodrich Chemical Co.** Mr. Sprock will be concerned with market development and technical service to textile firms in the southeastern area.

Oliver D. Landis, Inc., has announced the appointment of Horace L. Short as sales representative for North Carolina. Mr. Short will be headquartered in Gastonia.

Frank League, Jr., has been appointed to the sales staff of **G. F. League Manufacturing Co.** Mr. League will call on customers in North and South Carolina and will assist other representatives in Georgia and Alabama.

Richard P. Newell has been elected vice-president of export sales for **Leesona Corp.** Mr. Newell was formerly with Saco-Lowell Shops.

Robert L. Peiffer has been named sales supervisor for textile and leather trades for the chemical division of **Minnesota Mining and Manufacturing Co.** From his headquarters in New York, Mr. Peiffer will be responsible for the area including New England, Pennsylvania, Delaware, Maryland, New York, and eastern Ohio.

The **National Vulcanized Fibre Co.** has appointed Roy S. Fisher, sales vice-president, as administrative vice-president. In addition to his previous responsibilities, Mr. Fisher will be in charge of industrial relations, order-service, traffic and marketing departments.

Roberts Co. has announced receipt of an order from J. P. Stevens & Co. for 50 Arrow M-1 spinning frames (16,000 spindles) to be installed in the Whitmire, S. C., plant. The new frames will be utilized to spin combed yarns in the finer counts from 60s to 100s for fine long staple cotton fabrics.

Saco-Lowell Shops has announced acquisition of exclusive rights to sell in the U. S. and its possessions the "Opener-Cleaner-Blender" and "Duo-Jet Cleaner" manufactured by **Davidson-Kennedy Co.** Saco-Lowell also has made a sales agreement with **Allgauer Maschinenbau G.m.b.H.** of Western Germany, for

Mr. Sprock
Goodrich

Mr. Short
Landis

Mr. Newell
Leesona

Mr. League
League

an advanced line of twisters.

Rolla H. Taylor has been named sales manager of **Scott Testers, Inc.**

Southern Mill Equipment Corp. has been appointed sales agent in the U. S. A. for the complete line of ESTA circular hosiery knitting machines manufactured by **Gottlieb Eppinger and Co.,** Dankendorf/Esslingen, West Germany.

Byron L. Fast has been appointed manager of the process service section of the **A. E. Staley Manufacturing Co.,** and Wendell D. Ray has been named an industrial sales manager. George M. Donelan, formerly assistant manager of the Cleveland office, succeeds Mr. Ray as manager of the Boston office.

A new plant facility for the rubber covering of rolls is being constructed in Neenah, Wis., for **Stowe-Woodward, Inc.** Scheduled for completion in July, the plant will contain facilities for handling the largest rolls made.

T. A. Mahan, formerly associated with Proctor & Schwartz, Inc., has been appointed district manager in the sales department of **The Textile Shops, Inc.**

West Point Foundry & Machine Co. has received an order from J. P. Stevens & Co., Inc., for 14 "Pacesetter" slashers for installation in eight different plants: Industrial Cotton Mills, Rock Hill, S. C.; Patterson

Booth METALLIC

Super Precision Metallic Wire

Years of investigation, research and mill study have resulted in the selection and development of Booth Metallic.

Booth studied all metallic wire available the world over, including types produced in Russia. In leading foreign mills with outstanding production records—Graf metallic wire was always the first choice.

Modifying this wire to the needs of American mills, Booth now offers a wire that is milled rather than punched, providing absolute uniformity of tooth shape and height with complete freedom from burrs. Even temper of Booth Metallic eliminates broken teeth and the super hard points prevent premature dulling. This superior wire costs no more than other makes.

A Booth representative can help you achieve the best in carding performance.

See us at the ATMA Show • Exhibit #390-91

QUALITY CARD CLOTHING SINCE 1892

BENJAMIN BOOTH COMPANY

ALLEGHENY & JANNEY STS., PHILA. 34, PA.

Booth

Sales Offices: Charlotte, N.C.—Richard Hurley • Philadelphia, Pa.—Norman F. Bush—REgent 9-8989 Greenville, S.C.—Hurley & Harrison • West Point, Ga.—Charles G. Stover • Lowell, Mass.—William Gill

THE *SMOOTHER* YOUR HANDLING, THE *MORE* YOU CUT COSTS

And you can't get faster, smoother, more efficient handling in textile processing than with Kennett Receptacles—first choice in the industry for basically better design, longer life, low cost.

Kennett Receptacles are made of National Vulcanized Fibre—not a fiber-board, but a tough plastic that combines light weight, strength, resiliency and an amazing ability to "take it" through years of abuse in mills. Most important, Kennett Receptacles are smooth . . . will not chip, tear, crush or splinter. Human hands cannot give delicate fabrics or yarns such gentle, snag-free handling. You cut container costs. You save in processing time. You cut loss from fabrics damaged in processing.

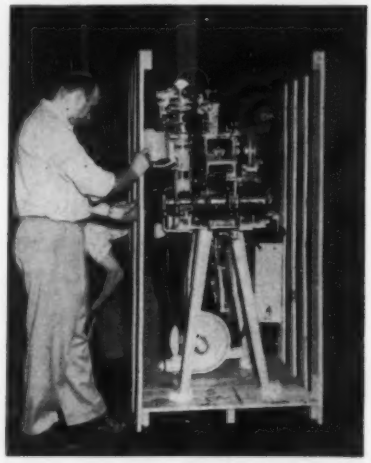
There is a Kennett size and design to fit any textile processing requirement, and Kennett products are backed by National's years of experience and proved dependability. For free line folder contact your nearest National Sales Office. Or write direct to Dept. W-5.

KENNETT
RECEPTACLES BY
NATIONAL
VULCANIZED FIBRE CO.
WILMINGTON 99, DELAWARE

In Canada: NATIONAL FIBRE CO. OF CANADA, LTD., TORONTO 3, ONTARIO

SUPPLIER NOTES

(from page 45)



Shipment of the first "Reading-Booton" 400-needle twin-feed women's seamless hosiery knitting machine was announced on February 26 by Textile Machine Works. Production of this machine, arrangements for which were made in 1959 (T. I. for Sept. 1959, page 161), is expected to be gradually increased to more than 200 units a month.

Plant, Roanoke Rapids, N. C.; Utica-Mohawk Plant, Seneca, S. C.; Appleton Plant, Anderson, S. C.; the Apalache Plant, Greer, S. C.; and Republic Plants No. 1, No. 2, and No. 3 at Great Falls, S. C.

Whitin Machine Works has announced sale of machinery as follows: Graniteville (S. C.) Co.—four "Axi-Flo" cleaners, 24 "Axi-Feed" units, and 4 downstroke cleaners for installation in the company's Granite Plant and Hickman Division in Graniteville; Harriet Cotton Mills, Henderson, N. C.—six "Even-Draft" drawing frames for Mill No. 2.

Newcombe C. Baker, Jr., has been named to the newly created post of manager of marketing services of the Yale Materials Handling division of **The Yale & Towne Mfg. Co.**

Speedry Chemical Products, Inc., has announced the acquisition of Manard Chemical Co., producer of chemically impregnated cloths. The new division, which has been moved to the Jamaica, L. I., plant, will be operated as a wholly owned subsidiary of the parent firm.

The **Knitting Machine and Supply Co.** recently presented a Stoll automatic flat Jacquard knitter and a Stoll hand flat knitting machine to the Philadelphia Textile Institute.

Here's how Rohm & Haas textile service makes sure your vat dyeing operation gives you *all* the profit you ought to be getting.

First, skilled technicians check your dyebath formulations—right on the machine, jig, package dye unit, or continuous range—with high precision electronic equipment. Then, from data collected in this way, we work out the optimum formulation for each shade . . . for more uniform dyeing, top efficiency, best color yield, increased production.

You can also help insure uniformity of results by standardizing on LYKOPON (Rohm & Haas concentrated sodium hydrosulfite) as the reducing agent for your vat dyes. For years, LYKOPON has been known by the trade as the "quality" hydrosulfite—LYKOPON is strong (94% as shipped)—carefully standardized and low dusting—the first and finest domestic sodium hydrosulfite.

A three-part team . . . skilled men, the latest equipment, LYKOPON and many other quality textile products . . . this is Rohm & Haas textile service.

LYKOPON *is a trademark, Reg. U.S. Pat. Off. and in principal foreign countries.*

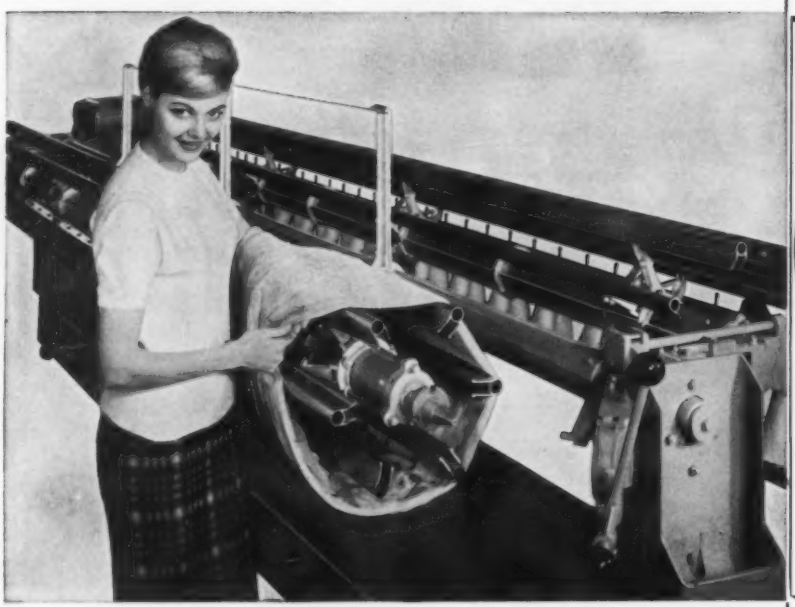
Chemicals for Industry

ROHM & HAAS COMPANY

WASHINGTON SQUARE, PHILADELPHIA 5, PA.

LYKOPON

Croon & Lucke manufacture more reeling machines than any other firm in the world



Simplest doffing of hanks
Yarn speed 1000 m and higher

Swifts infinitely variable within large ranges of circumference of swift. Nevertheless always the same circumferences of swift are guaranteed

When using Croon & Lucke Reeling Machines you save labour costs not only in the reeling department itself, but also at the following working processes. Moreover long yarn lengths free of knots are achieved.

Hanks produced on Croon & Lucke machines are renowned for perfect dyeability and equality at the mercerising as well as for trouble-free running-off during coning at high speeds.

If you have to reel fine yarns (cotton, worsted yarn, linen, synthetics), the only machines that work economically are Croon & Lucke Reeling Machines.

CROON & LUCKE GMBH, MASCHINENFABRIK, MENGEN/WURTT. DEUTSCHLAND

Postfach 30, Telefon: Mengen 285, Telex: 0732515, Tel. Adr.: Croonlucke

ATME, Atlantic City
Booth 924-927

→ coded assurance of controlled, uniform MUTUAL product purity

Like reagent chemicals and fine pharmaceuticals, *all* packages of MUTUAL chromium chemicals bear a quality control number similar to the "8 2M 2" stamped on the sodium bichromate bags pictured above.

These coded control numbers are your assurance that the MUTUAL products you are shipped meet our purity specifications that have helped to set the industry standards. Should the need arise, you can obtain a detailed analysis of the product you are using by referring to the code number on the package in your request.

Incidentally, the MUTUAL Sodium Bichromate shown here is available in both Technical and C.P. grades, and in granular or solution forms. In addition to 100-lb. paper bags and Triotex bags, it is also available in 400-lb. fiber drums and 100-lb. steel drums. Standard or custom solutions are shipped in tank cars or tank trucks. Each package bears the MUTUAL control number to assure you of uniform performance and consistent results.

For information on any of MUTUAL's complete line of chromium chemicals, mail the coupon.

Mutual® Chromium Chemicals

Sodium Bichromate
Sodium Chromate
Chromic Acid
Potassium Bichromate
Potassium Chromate
Ammonium Bichromate
Koreon (one-bath chrome tan)

Allied Chemical

SOLVAY PROCESS DIVISION
61 Broadway, New York 6, N. Y.

MUTUAL chromium chemicals are available through dealers and SOLVAY® branch offices located in major centers from coast to coast.

SOLVAY PROCESS DIVISION 85-50
ALLIED CHEMICAL CORPORATION
61 Broadway, New York 6, N. Y.

☐ Please send Bulletin 52, "Chromium Chemicals"

☐ Please have a representative call

Name_____

Position_____

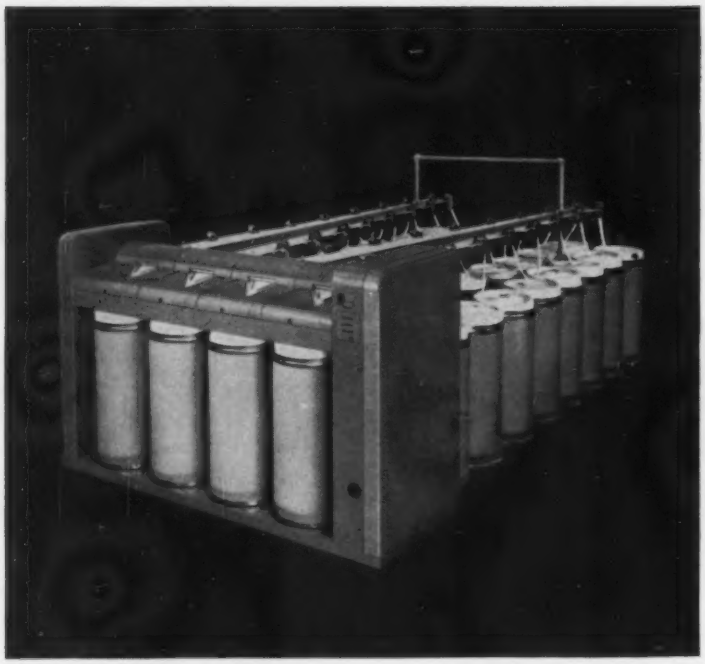
Company_____

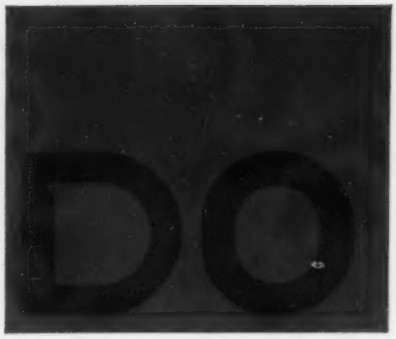
Phone_____

Address_____

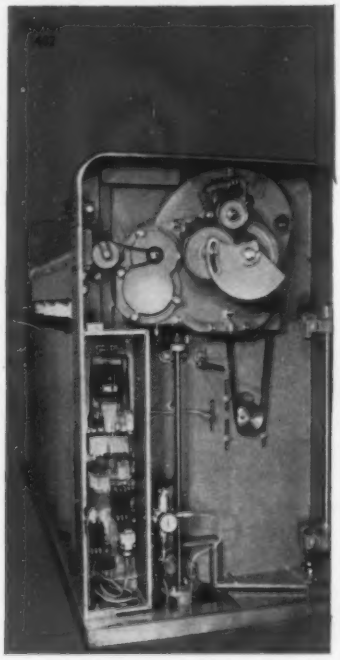
City_____ Zone_____ State_____

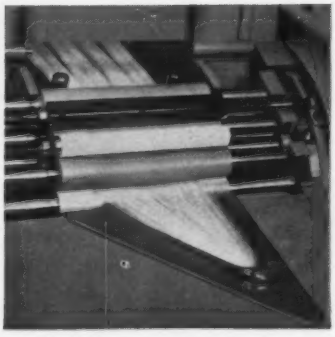
Rieter





High speed drawing frame for cans up to 18" x 42" and with a delivery speed of up to 600 ft/min.





In addition to this drawing frame, 3 other Rieter machines will be exhibited at the Atlantic City Show.

Rieter's high speed drawing frame D O represents an entirely new conception, permitting a considerably increased output in quality slivers at drastically reduced production costs. It incorporates numerous improvements and basic innovations, which give this model a definite superiority over all previous types of drawing frames. Points which particularly deserve attention are: feed tables with driven calender rollers, ensuring positively controlled sliver feeding without false drafts; new-pattern Polar drafting arrangement with master setting of the nipping distances; axial suction combined with self-cleaning clearing device; pneumatic weighting of the top rollers; funnel shaped delivery plate with entirely new sliver compression, cleared by air suction; coiler wheel with spiral sliver duct; large can sizes (up to 18" x 42") at the delivery end; anti-friction bearings at all important bearing points and main gearing in oil bath; electric monitoring with automatic stop motion and signal system.

Rieter Machine Works Ltd
Winterthur Switzerland

Representative for the USA and Canada:
AMERICAN RIETER COMPANY, INC.,
WEST CALDWELL, NEW JERSEY

Two-piece linen dress
designed for young America by
Ellen Brooke
for Sportswear Couture

These outstanding vat dyes have long been the standards for a wide range of greens from jade and kelly to bright pastels.

Now National Aniline's continuing quality improvement program gives them a new working advantage. Both dyes are *redispersible* . . . meaning cleaner, speck-free dyeings and little or no waste.

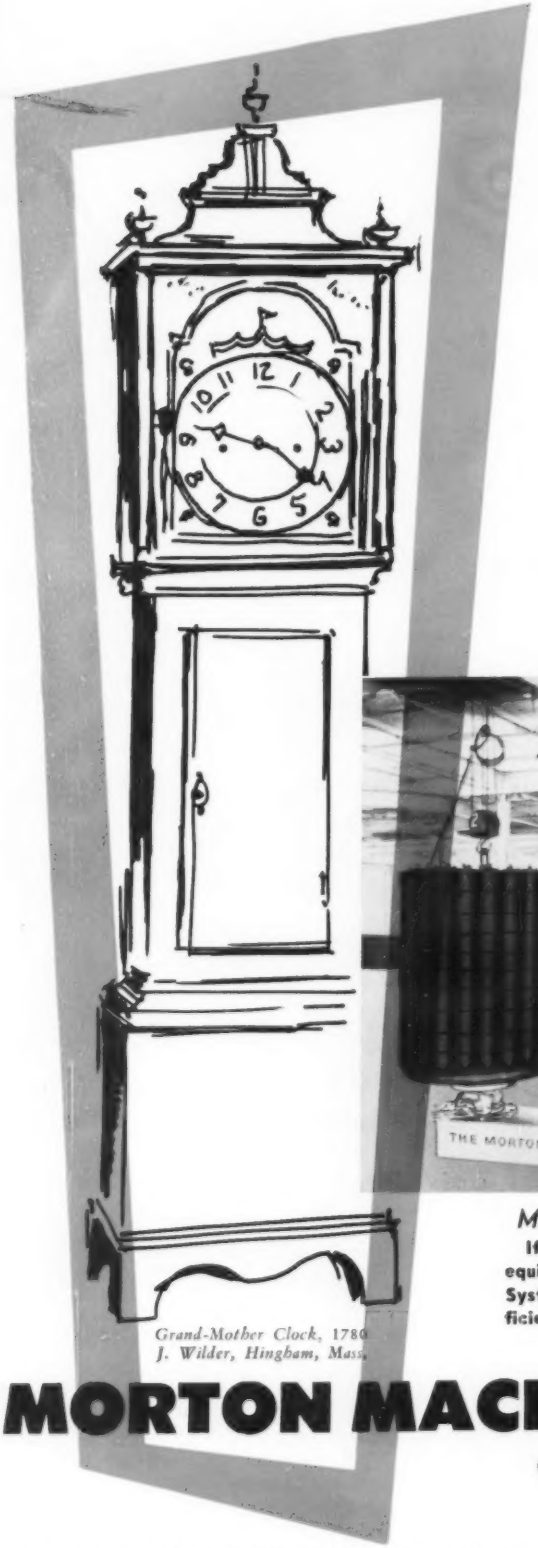
In addition they exhibit minimum pigment-migration in pad-steam operations.

Recommended for printing as well as dyeing, these vats produce excellent resistance to light, washing and all other color-deteriorating factors.

Get the benefit of the improved working properties these Carbanthrene Vat Dyes give you. Write for samples today.

NATIONAL ANILINE DIVISION
40 RECTOR STREET, NEW YORK 6, N. Y.
Atlanta Boston Charlotte Chicago Greensboro Los Angeles
Philadelphia Portland, Ore. Providence San Francisco
In Canada: ALLIED CHEMICAL CANADA, LTD., 100 North Queen St., Toronto 18
Distributors throughout the world. For information:
ALLIED CHEMICAL INTERNATIONAL • 40 Rector St., New York 6, N. Y.

Allied Chemical



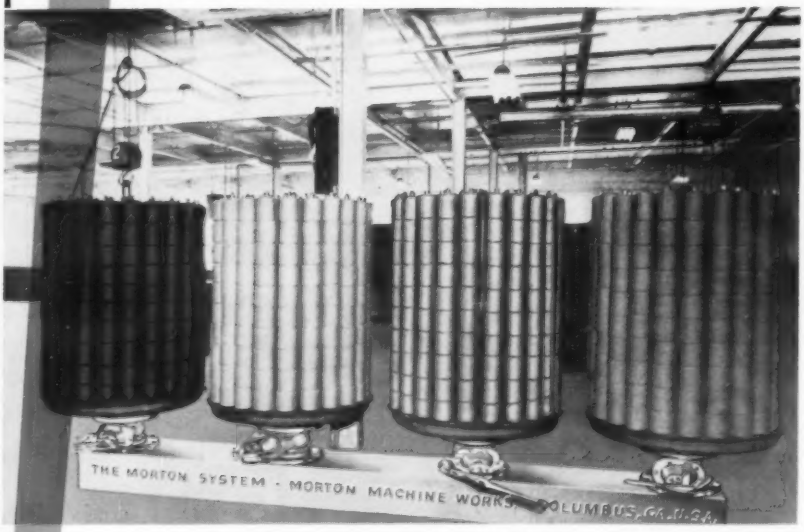
Grand-Mother Clock, 1780
J. Wilder, Hingham, Mass.

IT'S TIME TO CUT COSTS

FOR THE MOST EFFICIENT DYEING & BLEACHING EQUIPMENT, INSIST ON

MORTON SYSTEM

THE FINEST MONEY CAN BUY



Morton System Combination Extractor-Dryer

If you're considering new bleaching, dyeing, and drying equipment, do not compromise on quality. Rugged Morton System Machinery is the finest you can buy and its high efficiency cuts cost. Built to ASME code specifications.

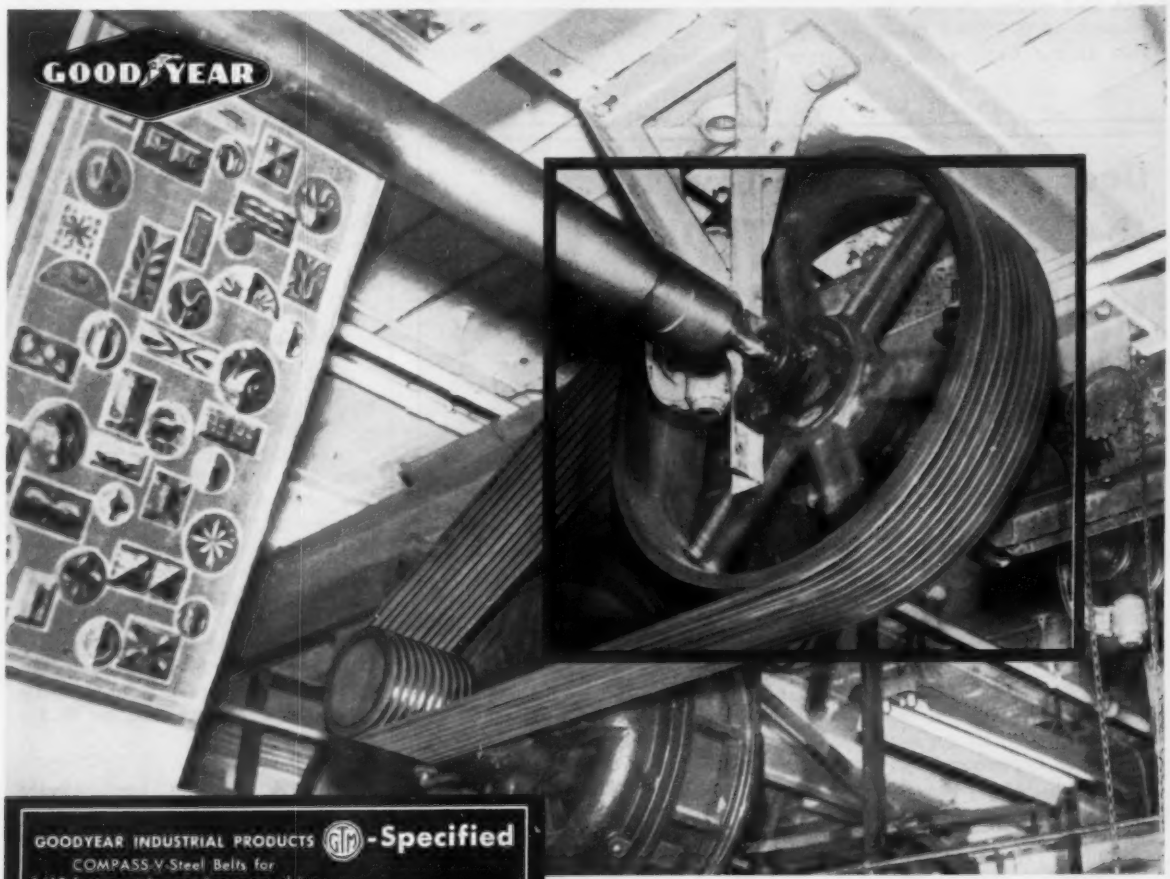
MORTON MACHINE WORKS, Inc.

COLUMBUS, GEORGIA, U.S.A.

Manufacturers of the MORTON SYSTEM Machinery for Dyeing and Bleaching of: **Beams ● Packages ● Stock ● Piece ● Tops**
Also Manufacturers of: **Valves ● Pumps ● Beam and Package Extractors and Dryers ● Dye Beams, All Makes and Designs ● Dye Tubes ● Dye Spindles ● Tube Spacers ● Stainless Steel Dye Tubes ● Custom Built Tanks to Customer's Specifications**

8 straight years of "no-problem" service! That was a lot more than this Southern textile mill expected from any V-belts when they contacted the G.T.M.—Goodyear Technical Man. But he knew COMPASS-V-Steel Belts with the Green Seal could handle the toughest assignments—confidently recommended a 10-belt matched set for this 24-hours-a-day, 5-to-7 days-a-week operation. Result: with only 2 minor adjustments in the whole 8 years, the G.T.M.'s belts have made this always-busy screen-print soaping range virtually no problem to the maintenance department. At last report, in fact, these Green Seal V-Belts still looked good for years more service.

Green Seal, Compass —T. M.'s The Goodyear Tire & Rubber Company, Akron, Ohio



GOODYEAR INDUSTRIAL PRODUCTS GTM-Specified

COMPASS-V-Steel Belts for 1413 feet per min. soaping range drive

All COMPASS-V-Steel Belts are now notched

A Load-carrying section of endless high-tensile steel cable

B Vents open between pulleys, dissipating heat

C Vents compress rounding pulleys, giving continuous gripping surface

D Highest-quality rubber underbody

E Sturdy bias-laid fabric cover resists wear

Even the hard-eyed G.T.M. often underestimates the dependability—and longevity—of industrial rubber products he recommends.

For you can't beat Hose, Conveyor Belts, or other products with the Goodyear label. For tips on how to get more out of any one of them, check your G.T.M.—Goodyear Distributor team. You'll find the phone number under "Rubber Goods" or "Rubber Products" in the Yellow Pages. Or write Goodyear, Industrial Products Division, Akron 16, Ohio.

lots of good things come from

GOODYEAR

THE GREATEST NAME IN RUBBER

MILL NOTES

A $2.5-million facility for the expansion of "3-T" tire fabric production at the Cartersville, Ga., plant has been announced by **Goodyear Tire & Rubber Co.** The new unit will require an approximate 60 per cent increase in the size of existing building facilities, which will combine dipping and stretching of cord into a single operation. Approximately 100 yards of fabric per minute will be produced and processed through the three-story machine, which is expected to be in operation early next year.

Employees of the National Plant of the **Standard-Coosa-Thatcher Co.,** Rossville, Ga., have been presented a safety award for operating more than one million man-hours without a lost-time accident.

A building containing 31,000 sq ft of floor space and located across the street from **The Mercer Yarn Co.,** Manayunk, Pa., has been purchased by the firm for storage purposes.

Two scholarships, each valued at $500 annually, have been established in the School of Textiles at North Carolina State College by **Erwin Mills, Inc.,** Durham, N. C. * * * A new building has been constructed at the Cooleemee, N. C., plant to house all finishing operations. It is anticipated that all machinery will be installed by July 1.

A compressive shrinking range has been installed at the **Lynrus Finishing Co., Inc.,** Poughkeepsie, N. Y.

E. T. Barwick Mills, Inc., Chamblee, Ga., has leased 3900 sq ft of showroom space in the Atlanta (Ga.) Merchandise Mart's new skyscraper facilities, now under construction. The showrooms, scheduled for occupancy in 1961, will feature a complete line of tufted carpets, rugs, and bathmats manufactured by the firm and its subsidiaries.

Redwood City (Calif.) Knitting Mills has moved into larger quarters at 150 Charter Street. Manufacturing space has been increased by 75 per cent.

Leon Atkind has been elected president of **Bonnie Lass Knitting Mills, Inc.** Stephan Schmidt has sold his interest in the firm to Mr. Atkind.

Installation of a 600-lb pressure dyeing machine for dyeing Orlon 21, has been completed by **Chwatt Bros., Inc.,** Brooklyn, N. Y. The firm has also purchased winding equipment.

A new sweater manufacturing firm, **Norlyn Knitting Mills,** has leased a modern, one-story plant at 16 Warrick Ave., Glassboro, N. J. Albraham M. Kopeika is head of the firm.

A new plant for the manufacture of knit products will be built on the outskirts of Marion, N. C., for **Washington Mills Co.** Construction of the first of three units will begin immediately and will contain 40,000

Continued on page 310

Does YOUR warper have . . .

- **DENSITY CONTROL?**
- **UNIFORM SPEED CONTROL?**

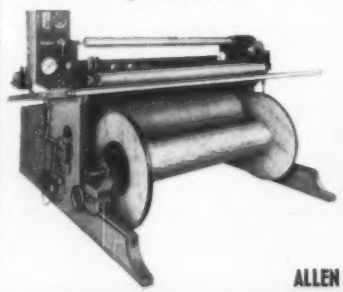
ALLEN MODEL "G", the modern warper with PATENTED HYDRAULIC CONTROL, gives you. . .

Uniform Density of Warp throughout entire build-up.

ALLEN PATENTED HYDRAULIC CONTROL maintains uniform pressure at all times between the beam surface and the pressor roll which drives the beam. The nip between this roll and beam is always at same distance and angle, so yarn tension is kept uniform. HARD-SHELL, SOFT-CENTER WARPS ARE POSITIVELY ELIMINATED.

Controlled Uniform Yarn Speed, variable at will.

ALLEN PATENTED HYDRAULIC CONTROL, maintains uniform pressure between beam surface and driving roll, assures positively uniform yarn speed—free from the abrupt jumps in speed experienced with now obsolete methods of constantly adjusting the drive speed in an endeavor to compensate for warp build-up. In addition, ALLEN VARIABLE SPEED DRIVE enables the operator to SELECT EXACTLY THE RIGHT SPEED FOR THE YARN BEING RUN. This means your ALLEN warper is always adjusted for MAXIMUM production consistent with QUALITY.



Don't put up with old-style warping!

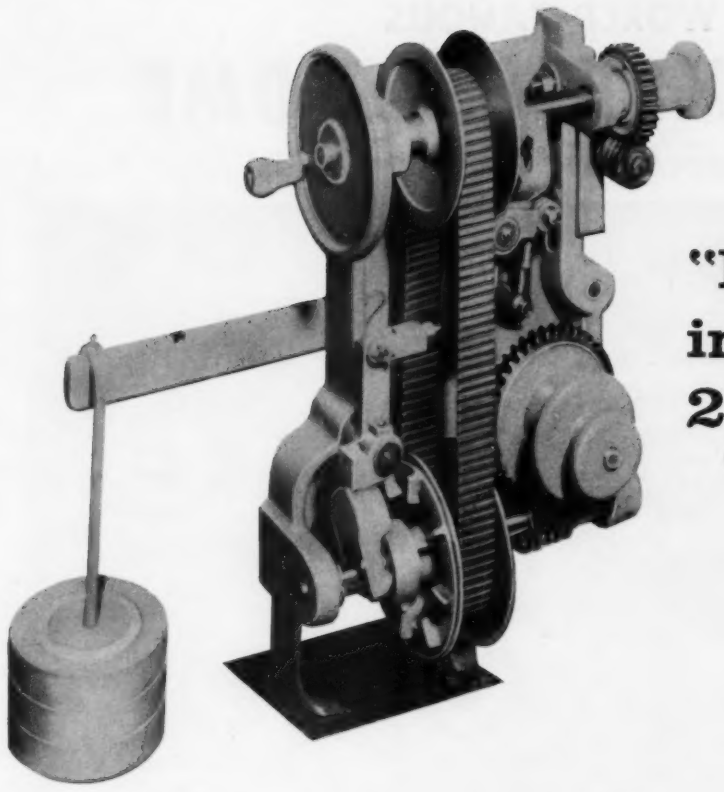
Put this modern warper concept to work along with your other modern equipment. Time-proved, patented,—no other warper has these features.

REQUEST "MODEL G BROCHURE."

ALLEN COMPANY, INC., NEW BEDFORD, MASS., U.S.A.

ALLEN MODEL "G"

World's Most Advanced High Speed Warper



"Pays for itself in less than 2 years..."

(FROM A CUSTOMER)

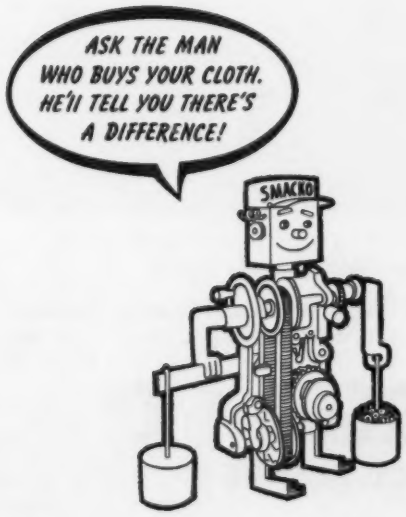
Hunt Let-Off®

That's what mill men say about the Hunt Let-Off. How? By increasing first quality production, lowering labor costs and decreasing seconds.

This positive Let-Off automatically maintains constant tension on looms from full to empty beam, thus decreases downtime for "fixing." The Hunt Let-Off eliminates wavy cloth and reduces set marks. It increases loom production while lowering weave room and cloth room costs. Thousands are now in operation on looms weaving plain and fancy cottons, synthetics, woolens and worsteds.

Ask your customer about the better quality cloth from looms equipped with the Hunt Let-Off.

Equip your looms with the Hunt now! And be sure to specify the Hunt when ordering new Crompton and Knowles and Draper looms.



WRITE, WIRE OR PHONE

SOMACO

SOUTHERN MACHINERY COMPANY

Box 3217-Station A, 5806 Augusta Road, Greenville, S. C., CRestwood 7-2116

WORLD FAMOUS

SCHLUMBERGER COMB

for French-Type Worsted Mills

OUTSTANDING for ready accessibility of all operating parts (including cylindrical comb) and for remarkable cleanliness of product. Settings made quickly.

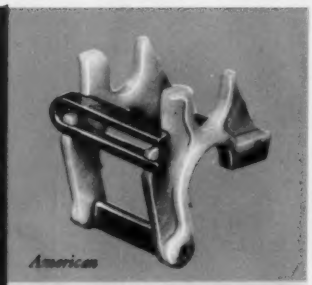
Also other worsted preparatory machinery

American Textile Machinery Exhibition,
ATLANTIC CITY, N. J. 23rd — 27th May, 1960
STAND No. 1423

N. SCHLUMBERGER & CIE

GUEBWILLER, ALSACE, FRANCE
Founded 1808

Staple


American

Rayon

JPS Rayon

PROGRESSIVE
NY-PRE-LON CRADLES

ELIMINATE WEAR ON BOTTOM ROLL NECKS NOW *with NY-PRE-LON CRADLES*

Cleaner . . . better yarn . . . greater economy

You get all these when you order cradles of molded NY-PRE-LON with PROGRESSIVE engineered features providing advantages not possible with steel cradles.

PROGRESSIVE NY-PRE-LON cradles are used on all types of spinning and roving frames including American system.

PROGRESSIVE also manufactures U-pins to fit all size cradles with varied widths and openings.

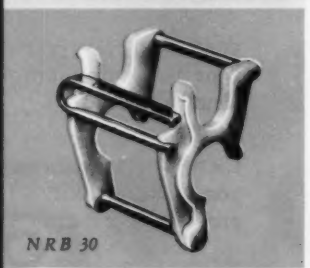
Made of molded **NY-PRE-LON**

Long life . . Yarn cleanliness . .
Hard, tough, smooth material . .
Heat and abrasion resistant

RDN 30

RDN 30 Rev.

NRA 30


NRB 30

NRB 6

Southern Representatives:

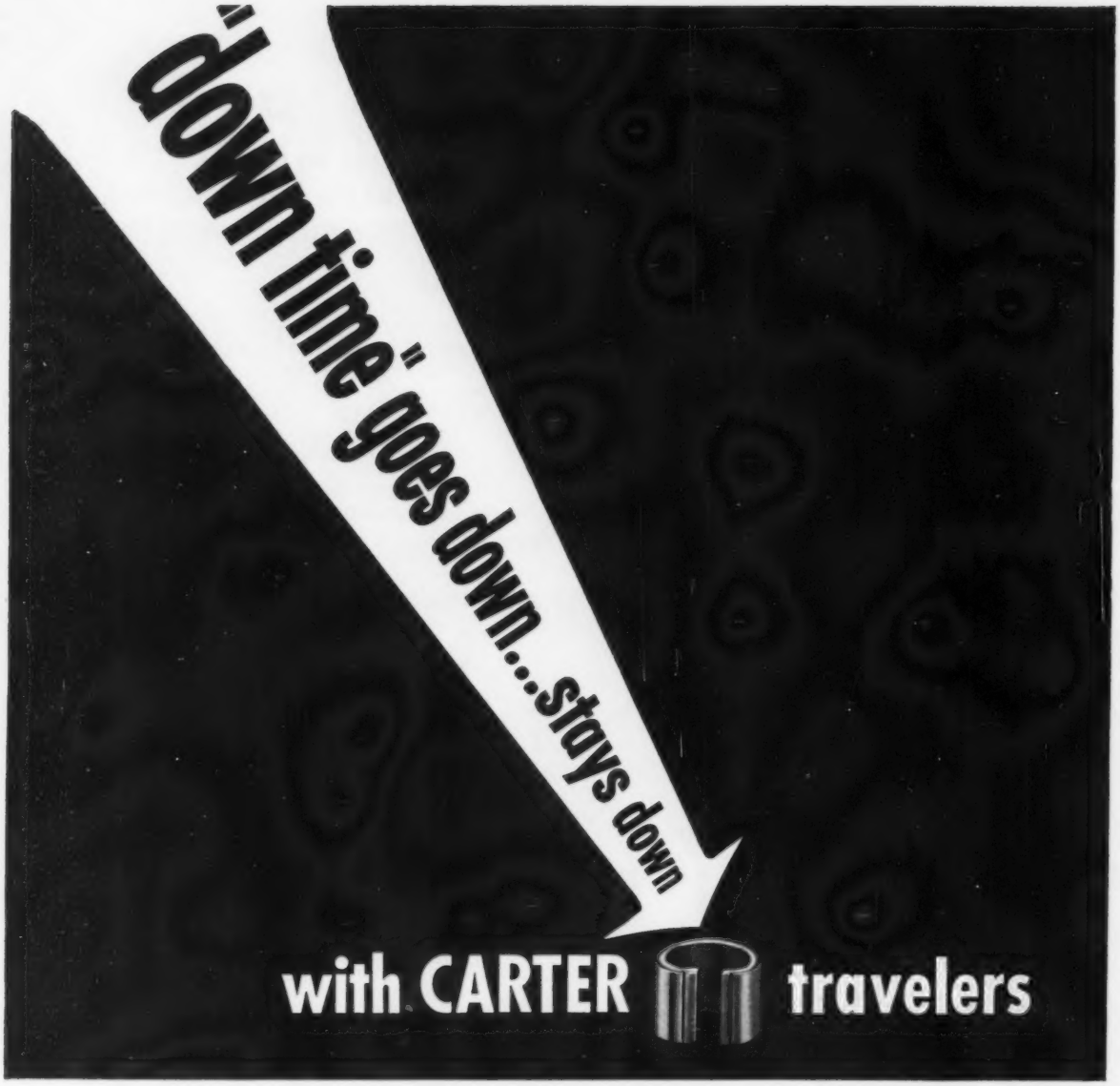
WATSON & DESMOND
Charlotte, N.C.

New England & Canadian Sales:
Direct Representation

Here is what the
PROGRESSIVE NY-PRE-LON
cradle does for you . . .

1. Eliminates wear on bottom roll necks.
2. Never needs lubrication . . . eliminating soiled aprons and yarn.
3. Eliminates wear on gudgeons of knurled top rolls.
4. Snap-lock action on bottom fluted roll ensures alignment of aprons.
5. Efficient operation not affected by worn bottom rolls. Wider circular bearing of the PROGRESSIVE cradle extends beyond the worn area and contacts the part which hasn't been necked by steel cradles.
6. Eliminates replacement of worn bottom rolls which have been necked by steel cradles.
7. Interchangeable with present steel cradles.
8. Can be used with most existing drafting systems.

PROGRESSIVE Engineering, Inc.
241 West Water St., Rockland, Mass., U.S.A.
Telephone: Rockland TRiangle 8-2920



When you specify CARTER TRAVELERS, you insure smooth, trouble-free spinning and twisting regardless of yarn count or spindle speeds.

Why? Because precision engineering—skilled craftsmen working with modern machinery—plus scientific laboratory quality control give you a product that cuts worry-time to a minimum...increases smooth running time.

Sold and serviced by a team of *specialists*, CARTER TRAVELERS help you make and sell a better product at a better profit.

ATMA
American Textile Machinery Exhibition - International

REPRESENTATIVES

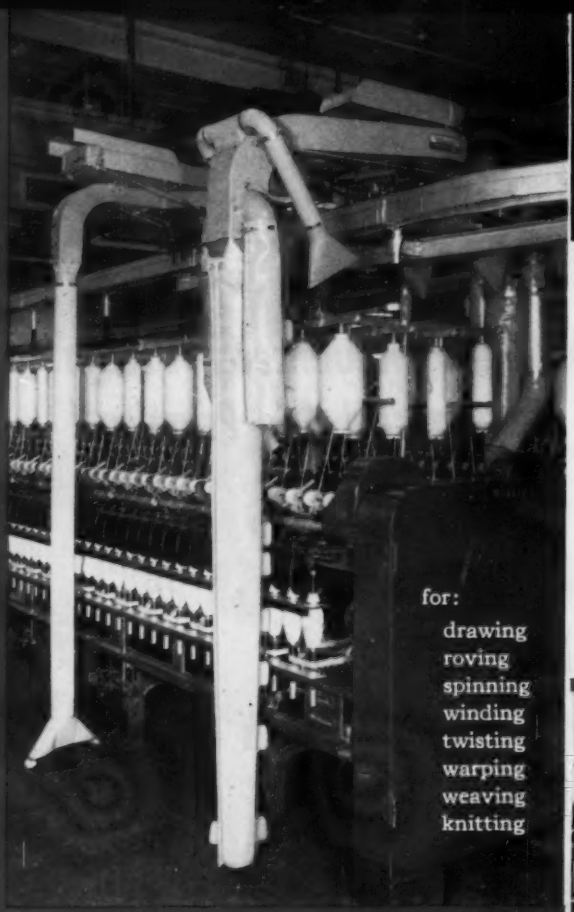
R. A. Haynes, Special Representative
114 W. Fifth Ave., Gastonia, N. C.
W. T. Horton ..... Belmont, N. C.
D. E. Phillips ... 2702 Garden Lakes Blvd., Rome, Ga.
P. L. Piercy ..... 128 Hudson St., Spartanburg, S. C.
J. R. Richie ..... 1307 Crabapple Lane, Raleigh, N. C.
J. K. Davis ..... P. O. Box 129, Auburn, Ala.
Oscar S. Lapham .... P. O. Box 651, Providence, R. I.
L. O. Talley ..... P. O. Box 1169, Mexia, Texas
Hugh Williams & Co.,
27 Wellington St., E., Toronto, Ontario, Canada

See us at Atlantic City
Booths 39-40

Carter
TRAVELER COMPANY

DIVISION OF A.B. CARTER, INC. MANUFACTURERS OF THE BOYCE WEAVERS KNOTTER GASTONIA, NORTH CAROLINA

Parks-Cramer®

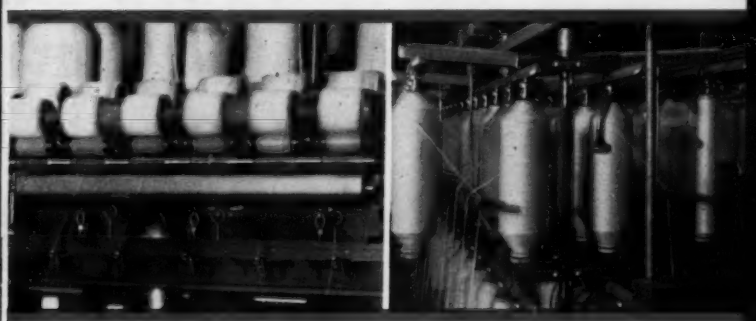


for:
drawing
roving
spinning
winding
twisting
warping
weaving
knitting

Traveling Cleaners

BLOWING UNITS
for machines and room surfaces

COOPERATING VACUUM UNITS
for floors and machines



SpinSaVac
END COLLECTION

SpinSaCreel
ADJUSTABLE

Quality equipment
for new and existing frames

Certified Climate

Atomizer humidification
Automatic Airchangers and Central Station systems
with and without refrigeration

Atlantic City
Booths 564-573

418

Parks-Cramer Company

FITCHBURG, MASS. CHARLOTTE, N.C. ATLANTA, GA.

FOSTER
MODEL 506
CONE WINDER

It's NEW! It's Advanced in Design!
It's Economical! It's Practical!

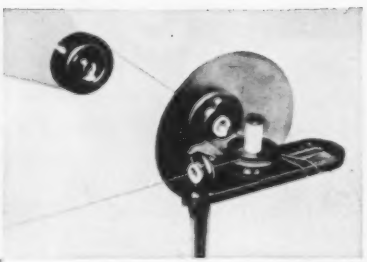
SEE IT IN OPERATION AT...
A.T.M.A. EXHIBITION
BOOTH 649 • MAY 23-27 • ATLANTIC CITY

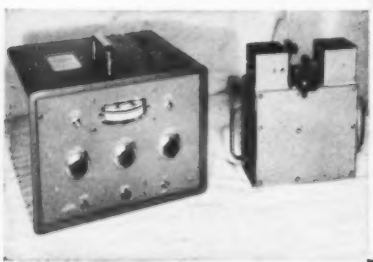
WE WILL ALSO EXHIBIT

. . . the following Lindly Electronic Controls and Detectors, for which we are exclusive selling agents in the textile industry in the U. S. A.

VISIT US at BOOTH 649
. . . and see the last word in cone winding and electronic controls for the textile industry.

LINDLY ELECTROTENSE
A yarn tensioning device for warper creels, winders, twisters, knitting machines, looms and similar equipment. It provides completely uniform tension for any number of ends and permits the overall adjustment of tensions by means of a single dial.



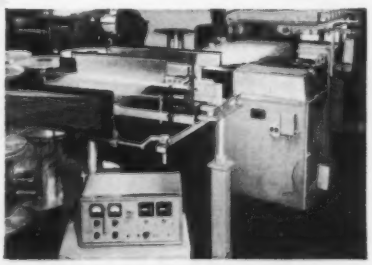


LINDLY DYNA-MICRO-GAGE
A photoelectric testing device for the continuous monitoring of spun and filament yarns and for checking the average denier of filament yarns, the uniformity of spun yarns and other operational elements that call for varying degrees of sensitivity.

FOSTER MACHINE COMPANY
A Yarn Winder for Every Purpose
Westfield, Massachusetts, U. S. A.

EXCLUSIVE SELLING AGENTS FOR LINDLY ELECTRONIC CONTROLS IN U. S. TEXTILE INDUSTRY

SOUTHERN OFFICE — Johnston Building, Charlotte, N. C.
CANADIAN REPRESENTATIVE — Ross Whitehead & Company Ltd., 2015 Mountain St., Montreal, Que. and 100 Dixie Plaza, Port Credit, Ont.
EUROPEAN REPRESENTATIVE — Muschamp Textile Machinery (Sales) Ltd., Elder Works, Wellington Road, Ashton-under-Lyne, Lancashire, England.

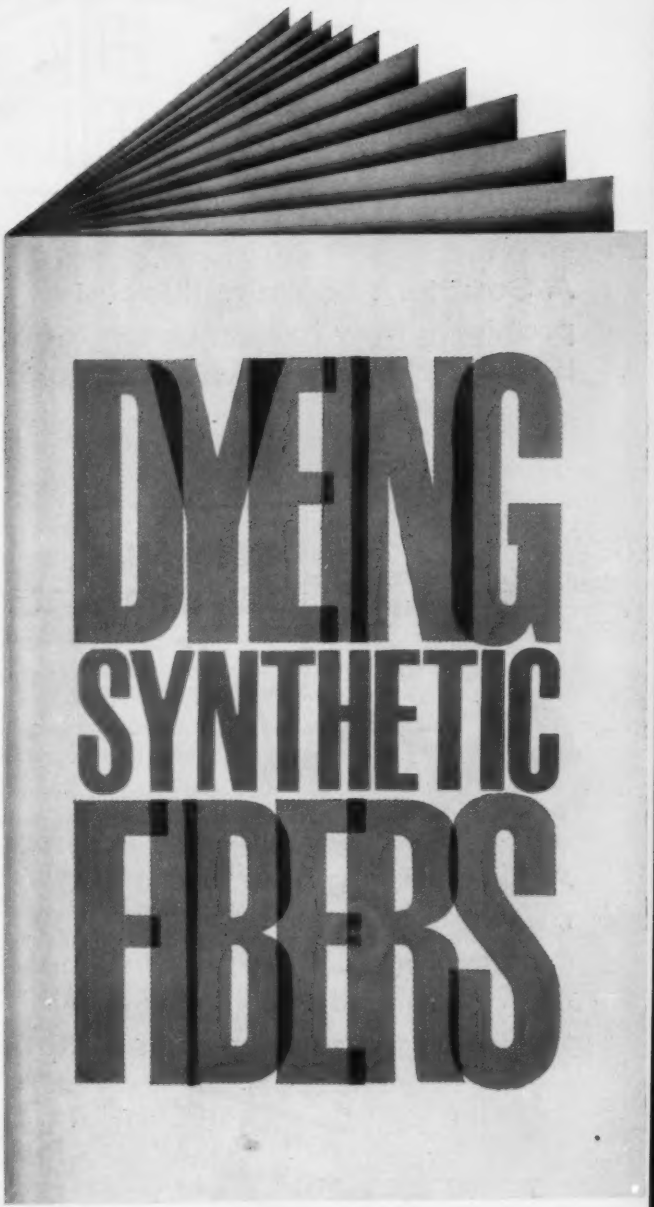


LINDLY AUTOMATIC YARN INSPECTOR
A high-speed, ultrasensitive photoelectric instrument for detecting yarn defects such as broken filaments, stripbacks and fluff balls in warping.

116-0

to help solve current problems

NEW SIXTH EDITION



Keeping pace with the advances in man-made fibers, GDC has revised and expanded this booklet to include new developments, as well as methods and suggestions for dyeing synthetic fibers.

Send in the coupon and receive your free copy of this valuable booklet without obligation.

From Research to Reality

gdc gaf

GENERAL DYESTUFF COMPANY
A SALES DIVISION OF
GENERAL ANILINE & FILM CORPORATION
435 HUDSON STREET · NEW YORK 14, NEW YORK

CHARLOTTE • CHATTANOOGA • CHICAGO • LOS ANGELES • NEW YORK • PHILADELPHIA PORTLAND, ORE. • PROVIDENCE • SAN FRANCISCO • IN CANADA: CHEMICAL DEVELOPMENTS OF CANADA, LTD., MONTREAL

GENERAL DYESTUFF COMPANY
435 Hudson Street, New York 14, New York

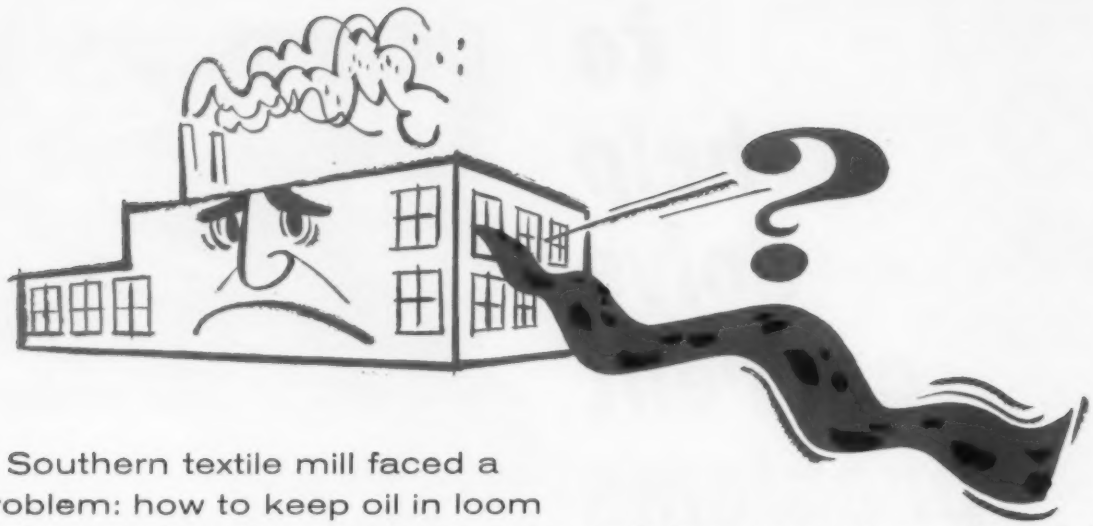
Please send free booklet on DYEING SYNTHETIC FIBERS (GS-66 REV) to:

NAME .....

TITLE .....

COMPANY .....

ADDRESS .....



A Southern textile mill faced a problem: how to keep oil in loom bearings, where it was wanted, and off the cloth, where it wasn't. The oil being used dripped, spoiled fabrics, and cut profits.

A Sinclair engineer recommended Sinclair NO-DRIP #15, combining a light-colored base oil for lubrication with special thickening agent to resist drip and throw-off. Now, cloth spoilage has been cut to a minimum, and lubricating costs reduced by one third. Let Sinclair solve your problem, too. Call your local representative or write

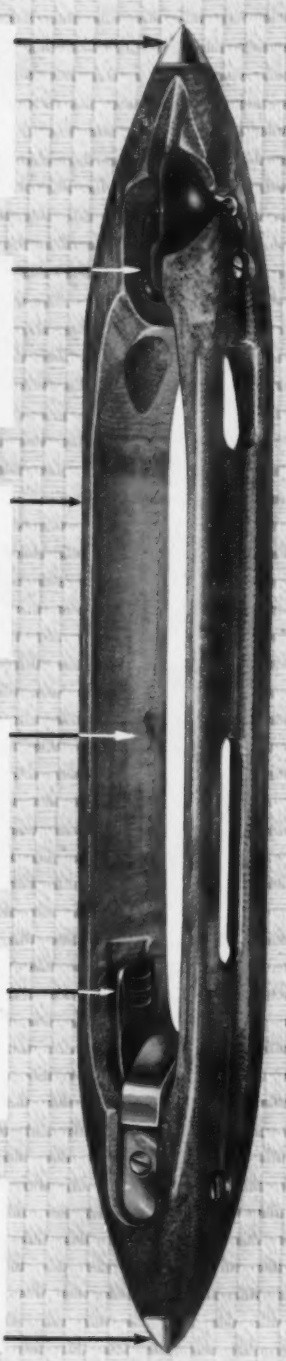
Sinclair

SINCLAIR REFINING COMPANY

TECHNICAL SERVICE DIVISION • 600 FIFTH AVE., NEW YORK 20, N.Y.

SAVE 50% ON SHUTTLE COSTS

With Southern DURAMOLD Shuttles



Inserted Tips, with today's miracle adhesives—virtually foolproof—with fiber washers to absorb shock.

Eyes, full range for any filling, fit better than wood, will stay tight longer.

Body is the toughest, strongest fabric-reinforced plastics available.

Chamber is the exact size and design *you* want.

Grips have better fit in the harder material, truer and longer-lasting quill alignment.

Tip offset—Southern duplicates *your* location exactly.

You can be certain of getting unusually large savings on your shuttle costs when you invest in Southern DURAMOLD Shuttles. There is no other shuttle anywhere near this remarkable shuttle for quality and stamina.

Once you put Southern DURAMOLD Shuttles in your looms you haven't a care in the world as far as long, dependable, trouble-free shuttle performance is concerned. The reasons are shown at the left.

The record shows that Southern DURAMOLD Shuttles average *four times* the life of other shuttles, and reports of *six* or *seven times* the ordinary shuttle life are not uncommon.

Invest in Southern DURAMOLD Shuttles *right now* and start getting *your* bonus savings . . . plus better quality fabrics. Ask one of our qualified Sales Engineers to show how *you* can save money by using these outstanding quality shuttles.

Stehedco
STEEL HEDDLE MFG. CO.
PHILADELPHIA 32, PA.
SOUTHERN SHUTTLE DIV.
GREENVILLE, S.C.
Southern

ATMA EXHIBITION
Atlantic City
May 23-27

VISIT the Stehedco BOOTH
#420-423 & #430-433

S-5920

Every feature works in your favor...dollar-wise

Here's how you benefit:

- no costly apparatus houses
- low operating and installation costs
- light weight permits ceiling suspension
- complete flexibility meets present and future needs
- provides all or any air conditioning combination such as humidifying, ventilating, heating, filtering, dehumidifying, evaporative or refrigerative cooling

Humiduct is an exclusive Bahnson design. A space saving, unit type system, it offers highest air conditioning efficiency at lowest cost.

Optional Easy-Flo Filters are economical air filters designed to prevent lint accumulation in the air conditioning equipment, thus reducing costly cleaning operations and providing more efficient air handling.

Clip coupon to letterhead. Mail today for FREE ILLUSTRATED BULLETINS—Bulletin 4A-Humiducts; Bulletin 27A-Easy-Flo Filters.

NAME_____

Bahnson

AIR-O-MATION

THE BAHNSON COMPANY • WINSTON-SALEM, N. C.

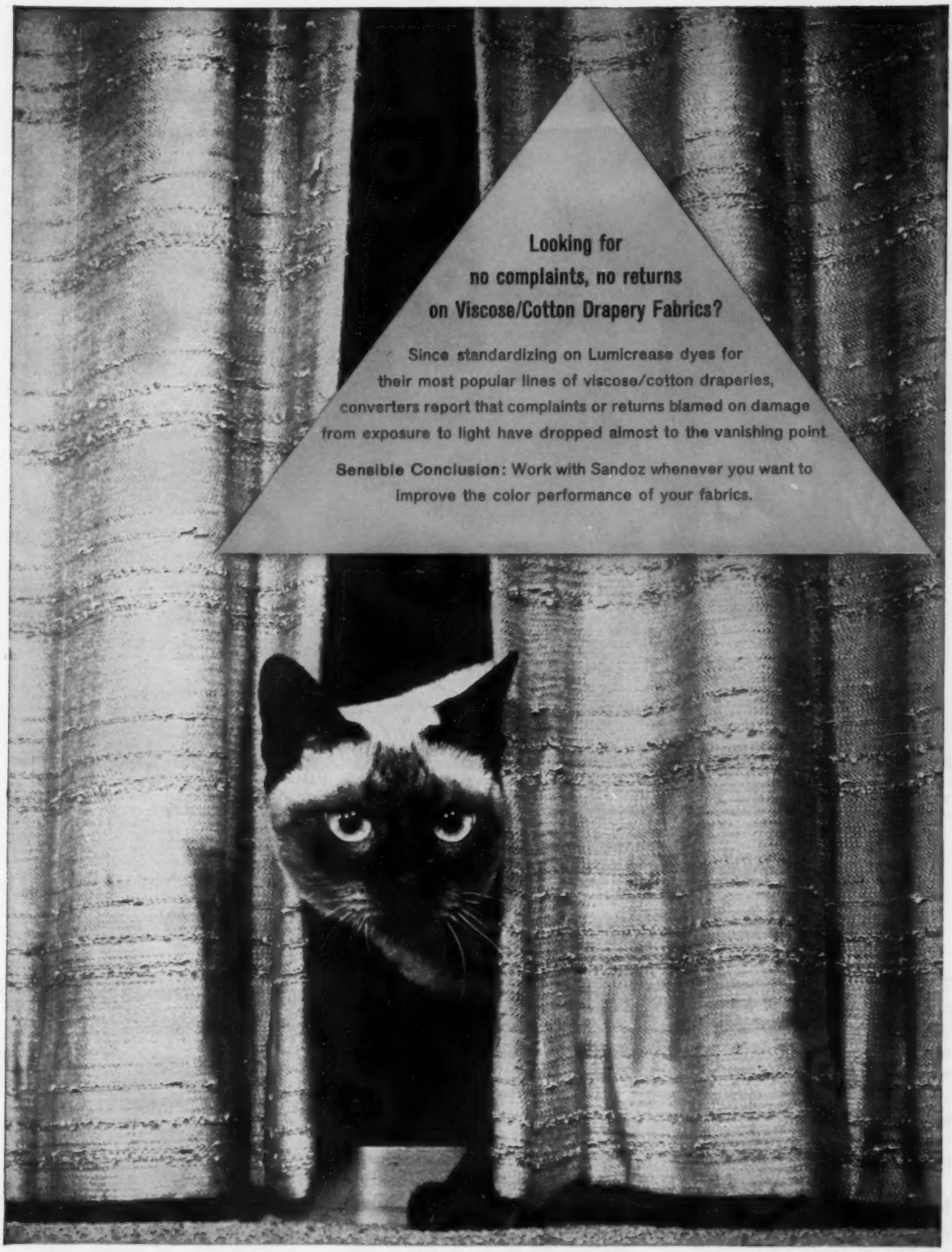

Looking for
no complaints, no returns
on Viscose/Cotton Drapery Fabrics?
Since standardizing on Lumicrease dyes for their most popular lines of viscose/cotton draperies, converters report that complaints or returns blamed on damage from exposure to light have dropped almost to the vanishing point.
Sensible Conclusion: Work with Sandoz whenever you want to improve the color performance of your fabrics.

Photo by Walter Chandoha

SANDOZ

Lumicrease dyes are the product of Sandoz, Inc.

District Sales Offices: Charlotte; Cincinnati; Hudson, Mass.; Los Angeles; New York; Philadelphia

61-63 VAN DAM STREET, NEW YORK 13, N. Y., ALGONQUIN 5-1700

Another new development using

B.F.Goodrich Chemical *raw materials*

ULOK Brand Cube-Type Filters, developed by Union Carbide Development Company, a Division of Union Carbide Corporation, New York, N. Y., offer the face area of a 30" x 30" air filter in the frontal area of a standard size filter, 20" x 20". Non-woven material is Dynel modacrylic fiber bound with Geon vinyl latex by Fiber Bond Corporation, Chicago, Illinois. B. F. Goodrich Chemical Company supplies the Geon vinyl latex.

New, cube-shaped air filters use non-woven made with Geon

The unusual shape of this new replacement air filter is planned to take advantage of a fibrous filter medium of uniform density—a non-woven construction made with Geon vinyl latex as a binder. The cube shape presents more filtering surface to the air stream, providing far higher efficiency over far longer life.

The filter design demonstrates how the unusual balanced physical properties of Geon latex as a binder can pay off. Geon is responsible for the resilience and strength in the batt, allowing the material to be cut, sewed, and formed into the required shape while still maintaining its 2" loft.

Here's another example of service and products you can get to produce better textiles for wider appeal, at lower cost. For information, write Dept. KA-3, B.F.Goodrich Chemical Company, 3135 Euclid Ave., Cleveland 15, Ohio. Cable address: Goodchemco. In Canada: Kitchener, Ont.

PRODUCTS FOR TEXTILE IMPROVEMENT

B.F.Goodrich Chemical Company
a division of The B.F.Goodrich Company

B.F.Goodrich GEON vinyls • HYCAR rubber and latex • GOOD-RITE chemicals and plasticizers

A New Molecule For
MERCERIZING

Do You Want—

— Fast uniform saturation with mercerizing caustic?

— Cost reduction by better value?

— Ease of handling with fast wetting in wide range of caustic and in acid?

— No toxicity problems due to cresylic acid derivatives?

— Better width control in mercerizing?

TC

SUL-FON-ATE BL EXTRA

Then—use SUL-FON-ATE BL EXTRA

This non-toxic mercerizing penetrant will satisfy all these needs.

Make request on your firm's letterhead for more detailed information and samples. **Write Section C-5**

Send me further information on **SUL-FON-ATE BL EXTRA**

Name_____

Company_____

Street_____

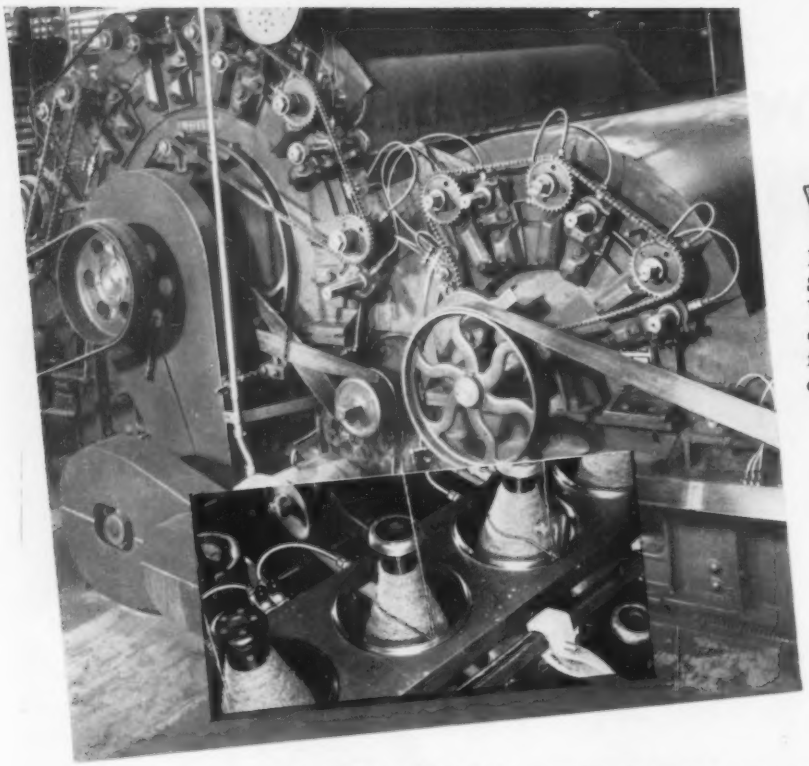
City_____ Zone_____

C-5. State_____

MARKETING RESEARCH AND DEVELOPMENT DEPARTMENT

TENNESSEE TC CORPORATION

1330 WEST PEACHTREE—SUITE 500—ATLANTA, GA.
PHONE: TRINITY 5-6616



WHITIN

New Whitin Full Roller Card Set, and ring rails of Whitin Wool Spinning Frames, are equipped with Lincoln systems for dependable lubricant application.

LEADING TEXTILE MACHINERY MANUFACTURERS PROVIDE

LUBRICATION SYSTEMS

The speeds and needs of today's complex textile machinery cannot adequately be served by old-fashioned methods of lubricant application. That's why prominent makers of modern mill equipment are *building in* Lincoln Centralized Power Lubrication Systems.

Lincoln systems apply the correct amount of viscous or fluid lubricants, through sealed tubing, to all bearings on individual machines or automated production lines . . . and to the inner surface of textile spinning and twisting rings. Refinery-fresh lubricant is supplied under pressure at predetermined time intervals—unerringly, automatically—while machines are operating. Downtime and loss of yield due to haphazard lubrication are eliminated.

Textile mills and plants throughout America have realized impressive cost savings and production gains with these efficient, economical systems. It will pay *you* to install Lincoln centralized lubrication on your existing equipment . . . and to *specify Lincoln on the new processing machinery you buy.*

See Lincoln Centralized Systems in Booths 307-308-309, A.T.M.A. Show, Atlantic City, May 23-27.

For further details, contact your nearby Lincoln distributor, and write today for Bulletins 806-R, 811 and 816.

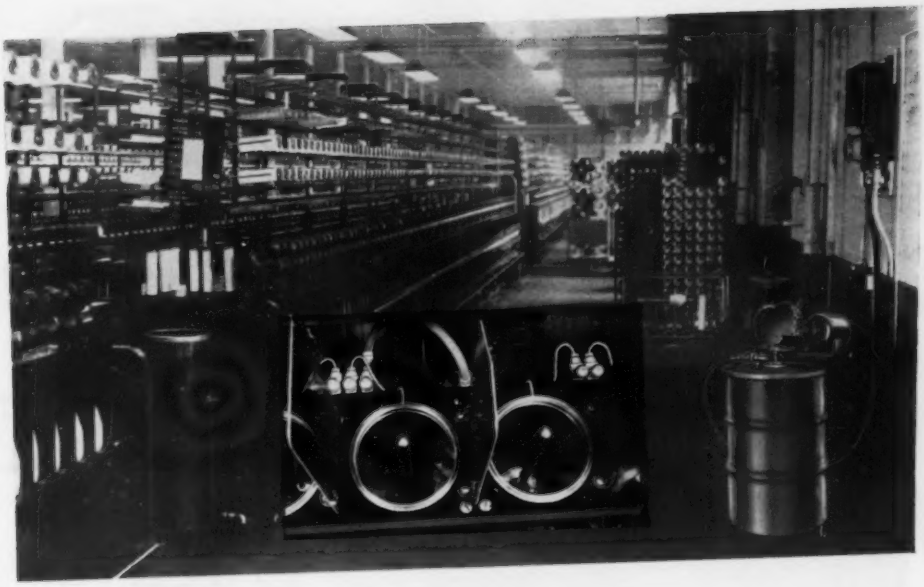
Coast-to-Coast Sales and Service Through 16 Branch Offices and Leading Industrial Distributors.

Lincoln

LINCOLN ENGINEERING CO.

Division of The McNeil Machine & Engineering Co.

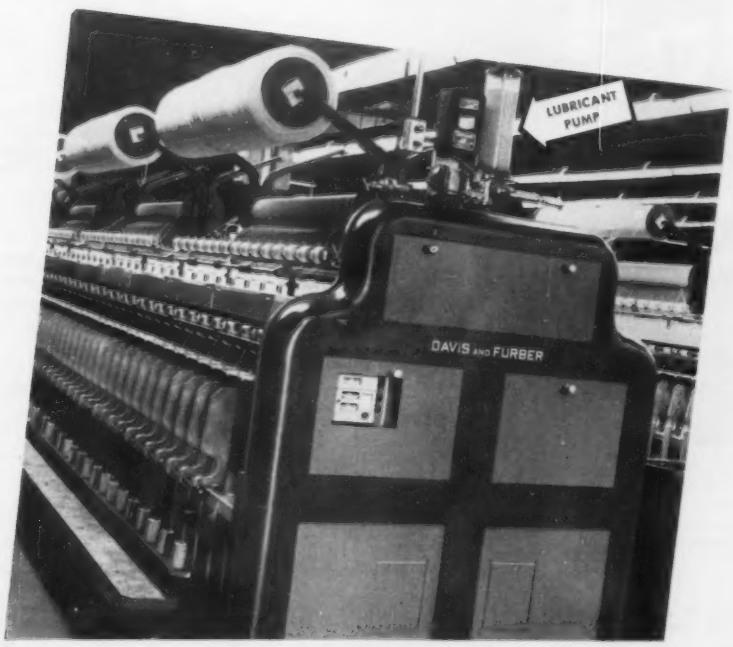
4010 Goodfellow Blvd. • St. Louis 20, Mo.



SACO-LOWELL

Lincoln pumps, each serving 228 injectors, provide controlled, automatic lubrication on five Saco-Lowell 4" Ring Twisters at Owens-Corning's Ashton plant.

LINCOLN CENTRALIZED as original equipment

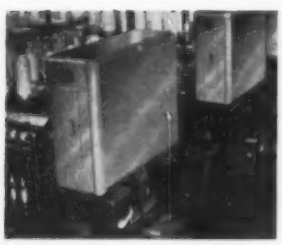


DAVIS & FURBER

Lincoln Centralized Lubrication System assures proper traveler drag and maximum ring life on Davis & Furber's Woolen Spinning Frames.

ONCE YOU GET THERE...

look us up...booth 761-764



Pneumafil's newest, the C-12 unit, handles the highest air quantity (38.5% more air for better cleaning) at lower pressures and at less horse power. Real economy!

See Pneumastop in action. See how it filters 1200 cubic feet of air per minute around a roving frame. cleaning and preconditioning each strand of roving.

See the latest Pneumafil equipment—precision engineered and tailored to meet the most specific requirements of every fiber, blend and drafting system. Only the knowledge gained from more years of experience in the science of vacuum cleaning can produce *genuine* Pneumafil—proven time and again to yield the highest return of any single mill investment.

American Textile Machinery Exhibition - International
ATMA
Parade of Progress
Atlantic City Auditorium
May 23 thru 27, 1960
Atlantic City, N.J., U.S.A.

PNEUMAFIL®

PNEUMAFIL CORPORATION 2516 Wilkinson Blvd., Charlotte, N. C.

PLANNING CENTRAL AIR CONDITIONING?

BUFFALO HAS THE QUALITY UNITS

- to fit your plant layout.
- to deliver the exact climate you need.
- to insure low maintenance operation.

EXCLUSIVE ADVANTAGES OFFERED IN BUFFALO CABINETS

FAN WHEELS are of the Mixed Flow type with non-overloading horsepower characteristics. No need to oversize motor. Made of aluminum for reduced weight, corrosion resistance.

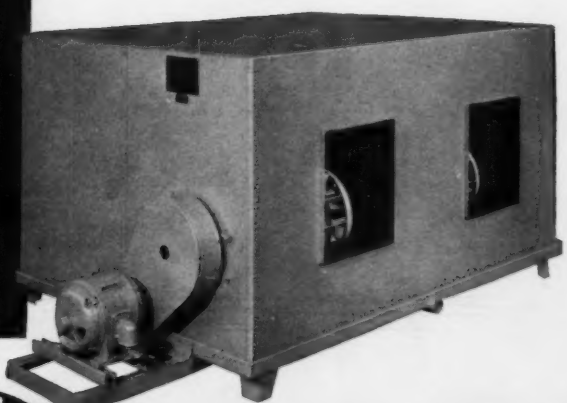
SHAFTS are oversize hollow type for perfect balance and operation well below critical speed.

BEARINGS are ball type, externally mounted for convenient maintenance.

CASINGS are removable; of heavy gauge galvanized sheets.

COILS are the highly efficient Aerofin brand.

ACCESSORIES offered include: filter boxes, dampers, mixing boxes, humidifiers and moisture eliminators.



Types PC & VPC — dry coil units for horizontal or vertical mounting. Types PCW & VPCW — wet coil units for horizontal or vertical mounting. Write for Bulletin AC-121.

"Buffalo"

BUFFALO FORGE COMPANY

Buffalo, New York

Buffalo air handling equipment to move, heat, cool, dehumidify and clean air and other gases.

Buffalo Machine Tools to drill, punch, shear, bend, slit, notch and cope for production or plant maintenance.

Buffalo Centrifugal Pumps to handle most liquids and slurries under a variety of conditions.

Squier machinery to process sugar cane, coffee and rice. Special processing machinery for chemicals.

Invented and developed by A. E. Staley Mfg. Co., Decatur, Illinois, after years of research—the new High-Temperature Converter affords textile mills new savings, new production efficiencies, new profit opportunities heretofore unattainable. The Converter gives trouble-free operation. Starts and stops itself automatically. Cleans itself after each shut-down without any dilution or change in finished product.

turn of this knob

Pearl Starch to a uniform-viscosity "Thin Boiling" size

Transforms *unmodified* corn starch into the exact size—with the exact viscosity and stability ... the exact properties and size characteristics you need.

These are but a few of the many advantages you get with this truly revolutionary new high-temperature converter—developed by Staley's...

More than a mere cooking device, Staley's High-Temperature Converter is a revolutionary, new *system* for making expensive, high quality warp sizes from low cost native, unmodified corn starch.

And it's so easy to operate. Just set the dials and forget it. In just a few minutes, the Converter delivers a *constant supply* of the precise warp size you desire—at a *saving of up to 60¢ per cwt.* over thin-boiling starch.

What about size quality and performance? The finished warp size possesses high uniformity in solids concentration, viscosity, and degree of conversion. Forms clear, flexible films with noticeably improved adhesion. Affords outstanding viscosity stability with exceptional resistance to breakdown and aging.

How Slasher Performance Is Improved

Thanks to its premium qualities and characteristics—the converted starch makes possible an over-all higher performance at the slasher. Mill performance records show these important advantages:

1. Cuts size preparation time from 2 hours to less than 10 minutes.
2. Faster size preparation permits quicker start-up of slashers.
3. Uniformity of size at size boxes result in greater uniformity of size add-on.
4. Greatly reduced hard-size on boxes and on yarns.
5. Less breaking, less ends out of lease.
6. Less scum in size boxes.
7. Smoother sized yarns.

How Weave Room Efficiency Is Increased

The converted starch gives top performance in the weave room where its improved yarn sizing produces increases in weaving efficiency with averages of from 1½% to 2½%. Here are some of the specific advantages you get:

1. Loom stops substantially reduced.
2. Reduction of hard-size streaks.
3. Reduces number of stuck ends.
4. Greater ease of drawing-in.
5. Relative humidity in weave room is less critical.
6. Marked reduction in seconds.

This is but part of the story. For complete information on Staley's High Temperature Converter and how it can cut sizing costs, improve slashing performance and increase weaving efficiency in your operation—see your Staley Representative, or write:

Staley's ®

A. E. STALEY MFG. CO., Decatur, Illinois

Branch Offices: Atlanta • Boston • Chicago • Cleveland • Kansas City
New York • Philadelphia • San Francisco • St. Louis

NEW PUSH-BUTTON ACCURACY FOR TENSILE TESTING!

Scott Model CRE Constant-Rate-of-Extension Tester — with its super-sensitive electronic weighing system and convenient push-button controls — takes all the work and weight-handling out of tensile, tear, seam construction, adhesion, and other physical tests in lab or production work. Convenient variability in crosshead speeds (400:1), and changes in chart speeds and test capacities are accomplished easily and positively on the centralized control panel. Model CRE provides a wide selection of test load ranges to 1000 lbs. . . . and wide controllability of crosshead speed versus recorder chart speed providing ample magnification for practically all materials. The unique visual time-to-break signal is an important built-in feature of Scott Model CRE. This tester makes use of all Scott clamps and fixtures (now incorporating a new quick-change clamp-locking design) to meet ASTM, ISO, and Industry Test Methods.

SCOTT TESTERS FOR TEXTILES

"SCOTAMATIC" MEANS AUTOMATIC CORD TESTING!

Another major Scott advance in testing tensile strength of textile yarns and cords, the Model IP-4 "Scotamatic" permits *fully automatic and unattended* testing and recording . . . for greatly reduced operating costs. Developed by the Engineering Division of Courtaulds Ltd., Coventry, England, this tester includes positive-acting controls plus electronic digital computing devices which permit continuous tests of an entire bobbin or up to 100 samples, with test data recorded immediately and permanently on tape. Operation is simple. One operator can supervise three testers simultaneously! Features include "Tensilgram" chart for picturizing stress-strain curves, and pre-established modulus-value (usually 10# for tire cord).

WRITE FOR COMPLETE CATALOGS ON MODEL CRE . . . "SCOTAMATIC" . . . AND SCOTT CLAMPS

QUICK-CHANGE SCOTT CLAMPS AND FIXTURES . . .

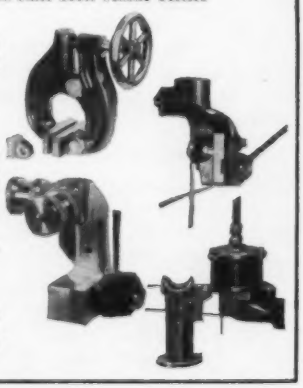
. . . all adaptable to Model CRE and other Scott Tensile Testers

FLAT GRIP CLAMPS FOR FABRIC
Here's one of many Scott Tensile Clamps (A-1) for textiles. Scott offers eleven different styles of flat grip fabric clamps for capacities to 2000 lbs.

CALLAWAY CLAMP FOR HEAVY CORDS
Widely used and universally approved for testing yarns and cords in the lab or at production. Two sizes: capacities to 75 lbs. and 400 lbs.

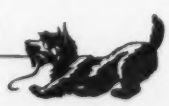
FLETCHER CLAMP FOR YARN
For testing fine yarns and flat materials up to ½" wide . . . up to 20 lbs. tensile.

SPRUANCE CLAMP FOR CORD
Pneumatically actuated. Helps make cord testing more automatic and totally free from operator influence. In step with today's trend to automation!



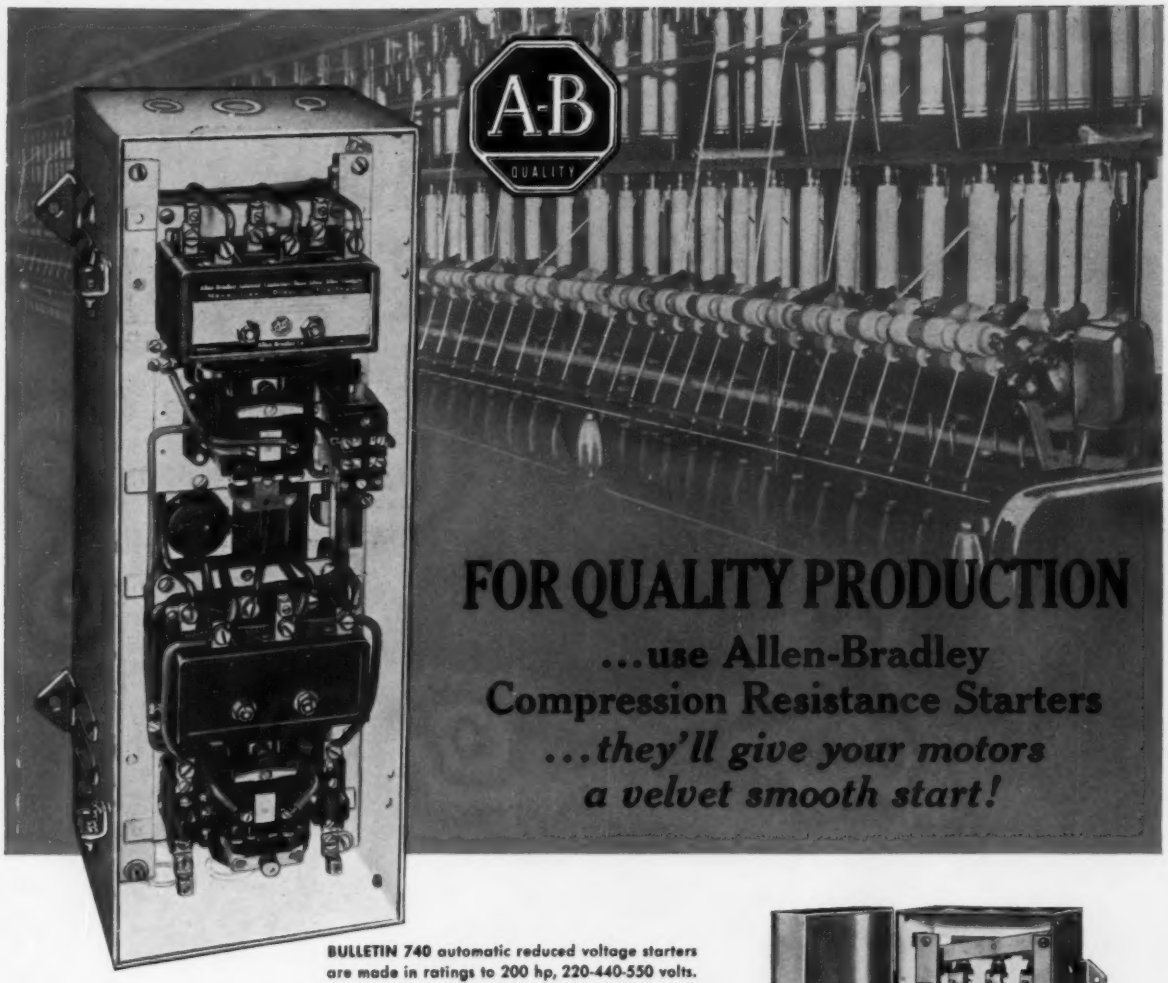
SCOTT TESTERS

THE SURE TEST . . . SCOTT!



See us at the ATME
May 23-27 • Booths 553-554

SCOTT TESTERS, INC.
60 Blackstone Street
Providence, Rhode Island



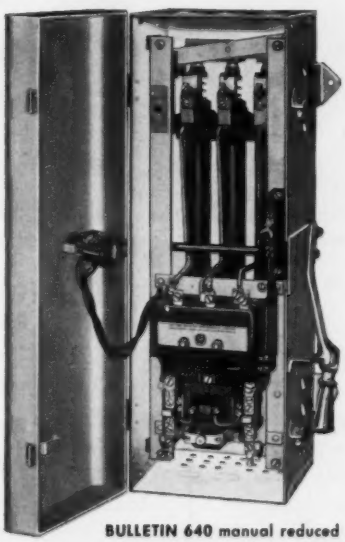
BULLETIN 740 automatic reduced voltage starters are made in ratings to 200 hp, 220-440-550 volts.

For starting machines handling delicate yarns or fibers, there's absolutely nothing on the market that can equal the velvet smooth acceleration provided by Allen-Bradley graphite disc resistance starters.

The A-B Bulletin 740 starter above has preset graphite disc resistors which are automatically inserted in series with the motor during acceleration, and they are cut out after a predetermined starting period. Both the resistors and the starting interval can be adjusted for velvet smooth acceleration.

When remote control is not needed, select the A-B Bulletin 640 manual starter. Here the graphite disc resistors change in resistance gradually as the pressure on them is varied, providing stepless acceleration. Operated by hand lever, the smooth starting is under control of the operator. No-voltage and dependable overload protection are provided. Please send for details on the complete line of Allen-Bradley reduced voltage starters.

Allen-Bradley Co., 208 W. Greenfield Ave., Milwaukee 4, Wis.
In Canada: Allen-Bradley Canada Ltd., Galt, Ont.



BULLETIN 640 manual reduced voltage starters made in ratings to 200 hp, 220-440-550 volts.

ALLEN-BRADLEY
Member of NEMA

QUALITY MOTOR CONTROL

Now.... a new PERKINS 3-ROLL CALENDER with many advanced features

High production and better finishing combine with easier operation and lowest maintenance cost to make this all-new Perkins 3-roll calender the "Calender of Tomorrow." Designed and built to give years of trouble-free operation, its many advanced features include:

- **Quick removal of intermediate roll without removing cheek pieces**
- **Independent pressure control of both sides of calender**
- **New let-off and wind-up**
- **Heavy welded steel frames and bearing housings**
- **All rolls run in tapered bore bearings for quick removal**

Visit us at the American Textile Machinery Exhibition
Atlantic City, N. J., May 23–27, 1960
Booths 163, 164, 169, 170

THE WORLD'S LARGEST MANUFACTURERS OF CALENDER ROLLS

B. F. PERKINS & SON, INC.
HOLYOKE • MASSACHUSETTS

Automatic tube trimmer; Sonoco-designed, Sonoco-built.

Specialized machinery for precision products!

Sonoco designs and builds most of its highly specialized production machinery in its own shops. In the past 60 years, Sonoco engineering accomplishments have included efficient cone and tube machines and countless other exclusive technical developments. As a result, the quality of Sonoco cones, tubes, cores and spools has shown a *pronounced improvement* throughout the years. And, as new developments take place in the textile industry, Sonoco builds new equipment to manufacture products for use in these processes and methods–products which meet customer requirements.

Sonoco has more than half a century experience in producing all types of paper textile carriers. Completely integrated manufacturing facilities assure close quality control. *Only Sonoco,* in its field, provides the necessary knowledge, skill and capacity to meet the ever-changing techniques of the textile industry. Let Sonoco experience help you!

SONOCO
Products for Textiles

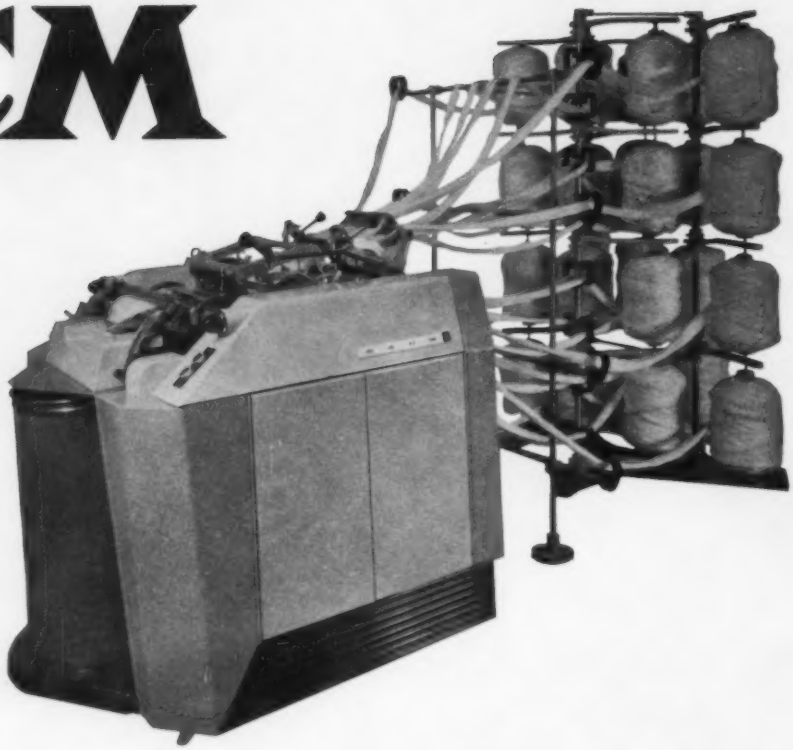
ATMA
American Textile Machinery Exhibition - International
Booth Nos. 82 and 83
May 23-27, 1960

sonoco
"Serving The World"
PAPER PRODUCTS

SONOCO PRODUCTS COMPANY, HARTSVILLE, SOUTH CAROLINA • Mystic, Conn. • Akron, Ind. • Lowell, Mass. • Holyoke, Mass • Phillipsburg, N. J. • Longview, Texas • Philadelphia, Pa. • La Puente, Calif. • Fremont, Calif. • Atlanta, Ga. • Brantford, Ontario • Granby, Quebec • Mexico City

1906

SACM
EXHIBITS



WORSTED
BOOTHS
1016 to 1018

Latest Model PERL COMB for Worsteds & Synthetics . . . Makes low cost French Combing possible. Runs at 175 nips per min. New ball creel preloads for 3 shifts. No one makes a French Comb like the French, and you will find no substitute for the inventor's experience . . . SACM. In the U.S.A. and Canada, Sales and Service of Continental Worsted Machinery provided by ATKINSON, HASERICK & CO., INC., FRAMINGHAM, MASS.

COTTON
BOOTHS
844 & 845
915 & 916

New 2 Head High-Speed DRAFTER (ER) gives higher efficiency, remarkable accuracy and improved accessibility. Reduced deliveries allows larger cans with fewer piecings. New simplified settings. High-speed, no-lap drafting. New creel prevents false drafts. In the U.S.A. Sales and Service are provided by MEDLEY MFG. CO., 400 32ND ST., COLUMBUS, GA.

PRINTING
BOOTHS
940 to 942

NOW! Low-Cost, Automatic Screen Printing on Existing Tables. New system duplicates finest hand work . . . returns profitability to screen printing on tables. Machine pays for itself quickly. IN THE U.S.A. AND CANADA PLEASE WRITE SACM, 3 CHANNING PLACE, CAMBRIDGE, MASS.

MANUFACTURERS OF A COMPLETE LINE OF WORSTED, COTTON & SYNTHETICS MACHINERY

Société Alsacienne de Constructions Mécaniques

Mulhouse, France

AT THE ELBOW OF THE MILL MAN EVERY HOUR

S-W ROLL EXPERIENCE

that brings improved processing with new products like

SEALSKIN® Slasher Rolls

which outlast other covers by 100% in most cases, which are reported to last up to 25% longer between grindings, which are described in the S-W "Sealskin" Bulletin.

STOWE-WOODWARD, INC.

Newton Upper Falls, Mass.

Neenah, Wisconsin • *Griffin, Georgia*

on the West Coast • HUNTINGTON RUBBER MILLS, INC. • Seattle, Washington • Portland, Oregon • Port Coquitlam, British Columbia, Canada

"How to Get Longer Life from a Rubber Covered Roll" — will be sent to you upon request.

USTER® *Matic*

First Public Showing in the United States at Booths 765-6-7-8 at Atlantic City

Be sure that your people who are going to Atlantic City see and report on USTER*matic*.

Under day-to-day mill operating conditions, USTER*matic* will tie 550 to 650 knots per minute, wiping out old-fashioned warp tying.

USTER*matic* speed, versatility and simplicity cut actual warp tying time in *half*, amounting to substantial labor savings and loom downtime.

USTER*matic* is universal—it will tie from a flat sheet, lease or any combination—changeovers being made in a matter of seconds.

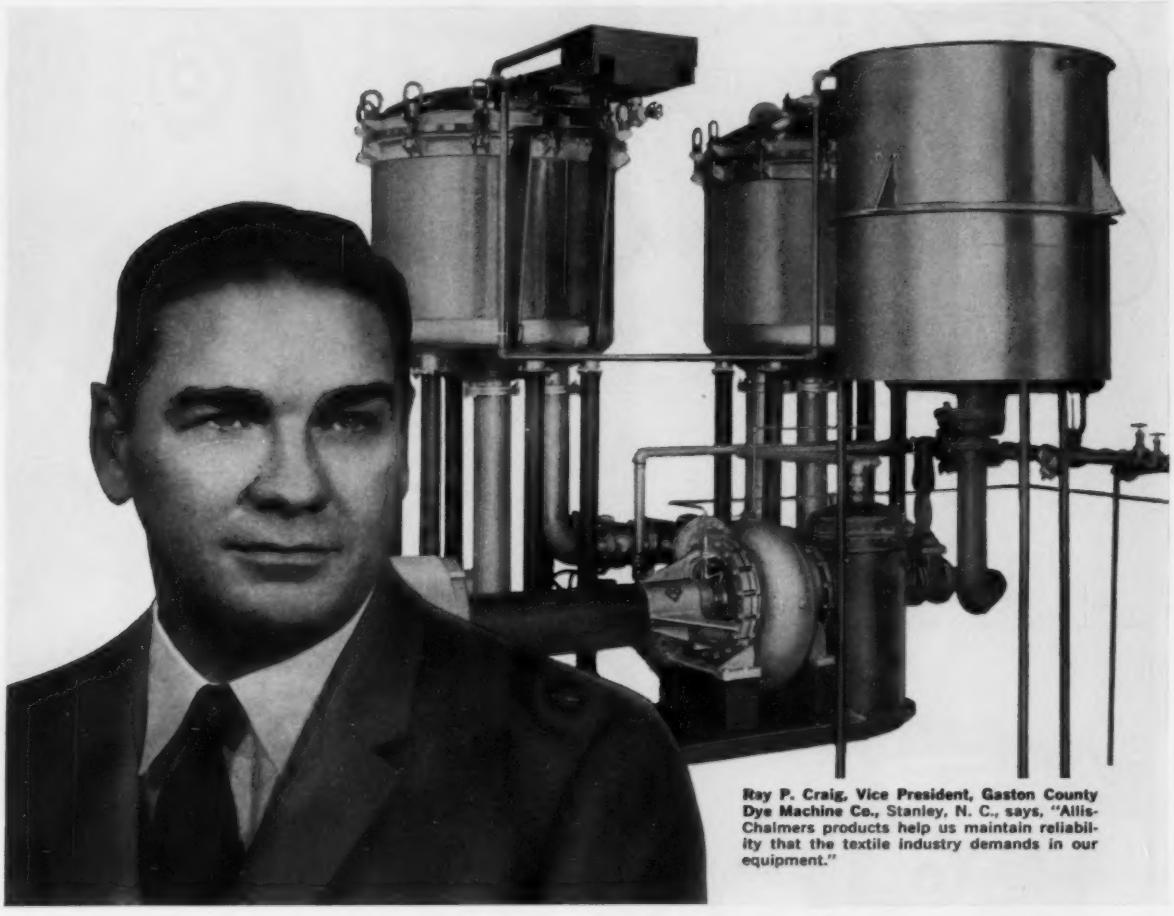
USTER*matic* ties virtually every known warp material.

See it in action. Have your people see it and report on USTER*matic* at booths 765-6-7-8 at Atlantic City.

USTER

Uster Corporation,
Charlotte, North Carolina.

ALLIS-CHALMERS



Ray P. Craig, Vice President, Gaston County Dye Machine Co., Stanley, N. C., says, "Allis-Chalmers products help us maintain reliability that the textile industry demands in our equipment."

"20 years of adding quality to quality"

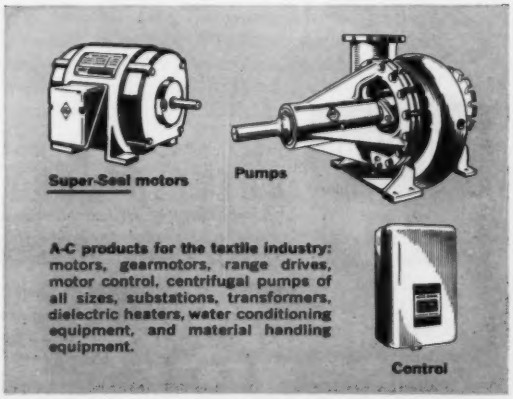
"Reliability of A-C products helps us produce better products for you"

As the largest producer of pressure dyeing and drying machinery for the textile industry, Gaston County Dye Machine Company has relied on Allis-Chalmers experience, service and product lines for 20 years. Company Executive Vice President Geo. H. Hacker says, "We are happy with our Allis-Chalmers relationship. Their unit responsibility for motors, control and pumps, and a very cooperative attitude in helping with our problems, result in single-source convenience for us, and for you."

Call in an Allis-Chalmers qualified sales engineer to assist in selecting components for your equipment or in planning plant modernization.

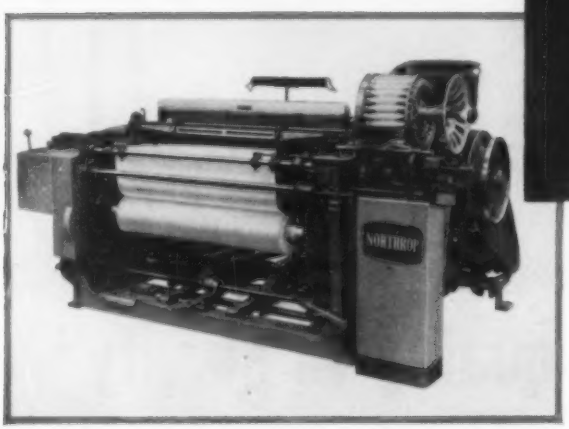
For further information write **Allis-Chalmers,** *Industrial Equipment Division, Milwaukee 1, Wisconsin.* A-1318

Super-Seal is an Allis-Chalmers trademark.


Super-Seal motors
Pumps
A-C products for the textile industry: motors, gearmotors, range drives, motor control, centrifugal pumps of all sizes, substations, transformers, dielectric heaters, water conditioning equipment, and material handling equipment.
Control

Fabrics of the moment . . .

An exciting coat and dress in Tootal "Wickerweave", lined Tootal "Robia" . . . . fabrics woven on Northrop Looms.



Northrop, the pioneers of Automatic Weaving, continue to set new standards in the production of quality fabrics.

Exciting new designs demand exciting new fabrics . . . . woven on Northrop Looms, of course !

For over 50 years British Northrop Limited have been manufacturing Automatic Looms . . . every one designed for maximum output and for the economic production of perfect fabrics in a range of widths in all the natural and many man-made fibres.

NORTHROP

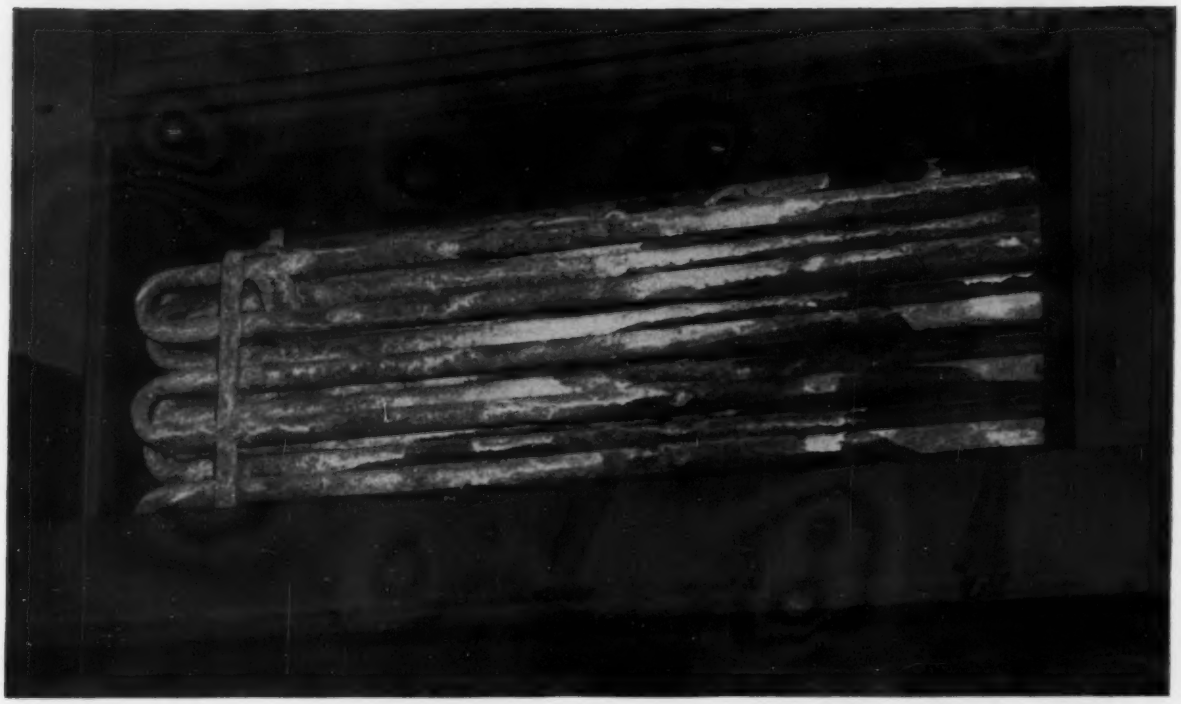
BRITISH NORTHROP SALES LIMITED
(A subsidiary of British Northrop Limited)

BLACKBURN · ENGLAND
Phone : Blackburn 4065 Telex 63 · 188
Grams : 'NORTHROP' Blackburn

Exhibitors At The American Textile Machinery Exhibition, Atlantic City May 23rd To 27th, Booth Number 842.

COOLEX & SR-2

will save your company money



Prevent SCALE and CORROSION

Corrosion and scale take an expensive toll in maintenance and repairs on cooling water systems and air washers. Scale can ultimately reduce the efficiency to a point of complete breakdown of your system. Of more immediate concern, rust and scale formations act as insulators and reduce heat transfer to an ineffective minimum. Capacity is lowered, operating costs are increased. Coolex and SR-2 will keep this from happening.

Coolex and SR-2 are dollars and sense, preventive maintenance products that prevent scale and corrosion in cooling water systems and air washers by neutralizing the effects of scale-forming and corrosive elements. Coolex and SR-2 are inexpensive, effective formulas which protect all surfaces they contact against rust, pitting, scaling, and delignification. Maximum efficiency of operation is assured, with a minimum expenditure for upkeep.

If you want to know more about these money-saving products, there are competent ANCO service representatives throughout the South ready to serve you. Call or write to one of the offices listed below and the ANCO representative near you will be glad to come by and give the full story. A simple preventive maintenance program now built around Coolex and SR-2 may well save you hundreds of dollars in replacement expense later.

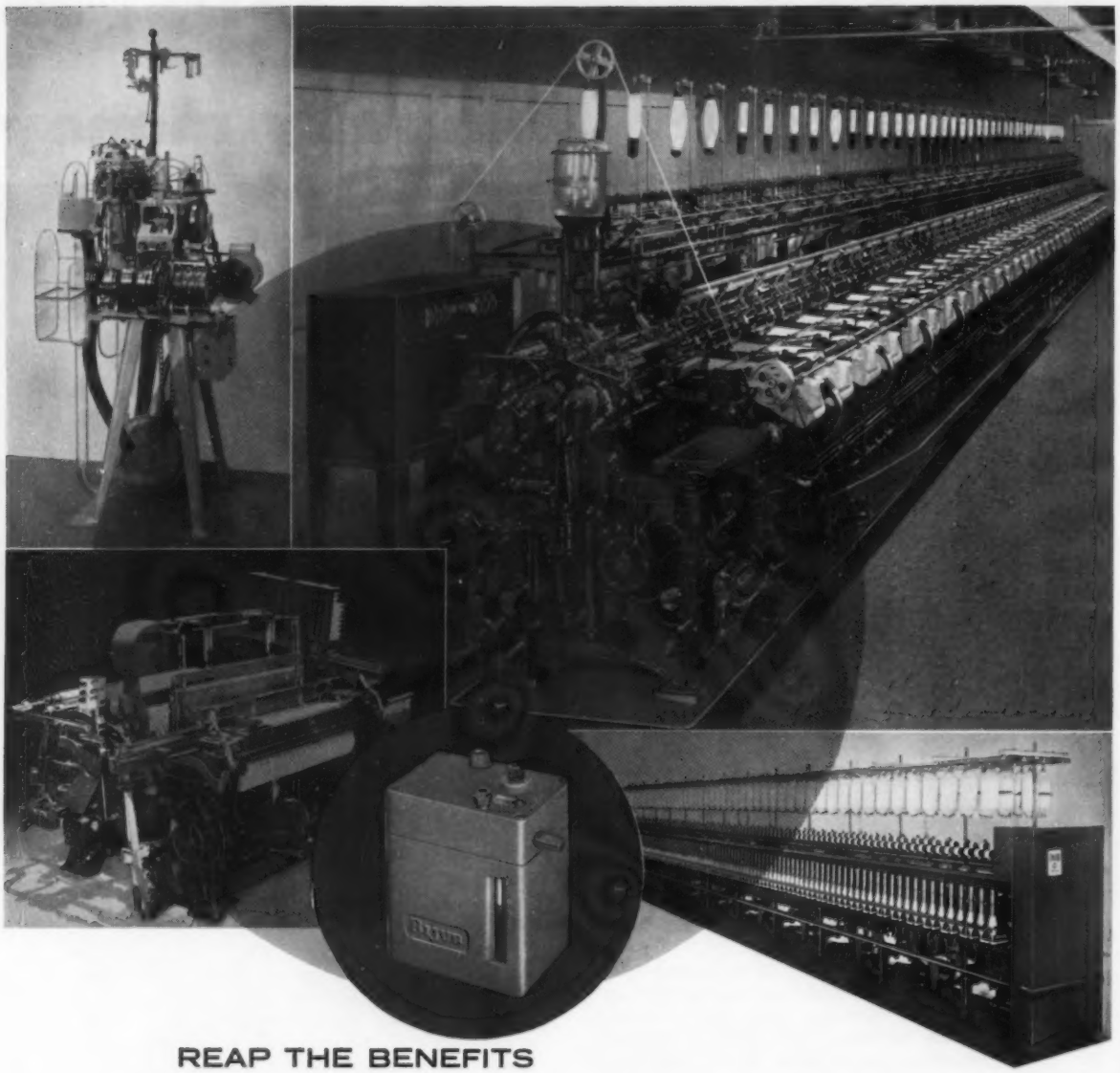
Write today and request an Anderson service engineer to make an analysis and recommendations on your plant's water treatment. There is no cost for this service.

SPECIALISTS IN MAKING WATER BEHAVE

Anderson Chemical Company, INC.

Macon, Ga., Box 1424 • Phone Sherwood 5-0466

Memphis, Tenn.: Box 2432, DeSoto Station • Phone: BRoadway 2-2806



REAP THE BENEFITS

# of BIJUR Automatic Lubrication

Bijur-lubricated machines are found in every type of textile mill on the top textile machines.

These simple, rugged, reliable lubrication systems have only three elements—the lubricator pump, distribution tubing and Meter-Units. Yet they lubricate the most intricate textile machines *automatically*, prevent oil spots on work, or bearing failures. Every bearing gets the right amount of filtered oil at the right time. There's less chance of personnel injury or fire risk. Oil consumption and downtime are reduced. Machines and mill are kept cleaner.

Why not install *Bijur* Automatic Lubrication on *your* machines and reap these benefits? We'll send further information on request.

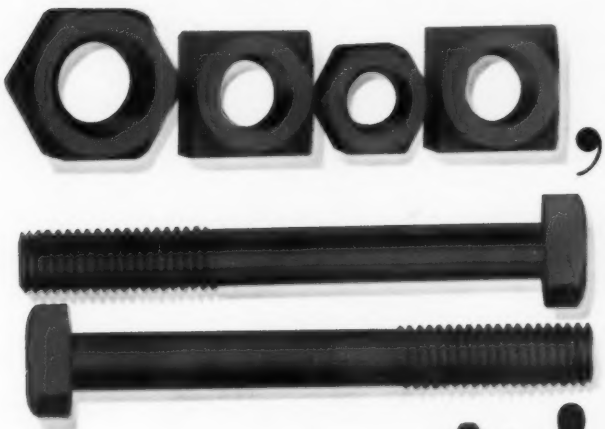
BIJUR LUBRICATING CORPORATION
Rochelle Park, New Jersey

Pioneers in Automatic Lubrication

There's more to a

HUNTER

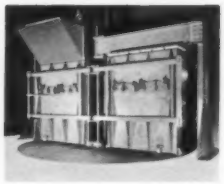
Machine than



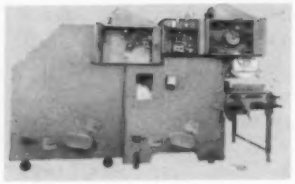
and

!.....

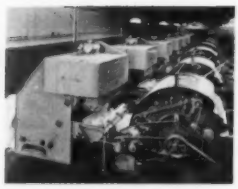
Flex Spools and Expanders



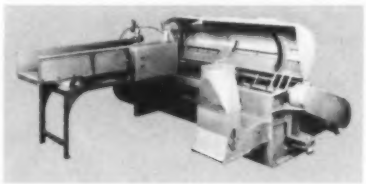
Baler



Tandem Feed

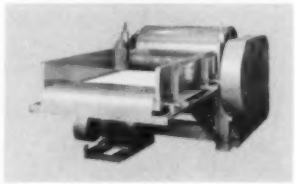


Imperial Automatic Weighing Feed



Cotton Picker, Model F-8

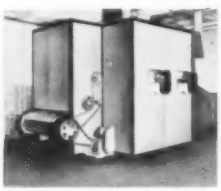
Condenser, Model B-8



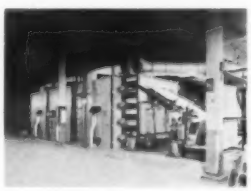
Shredder, Model M-2

For Example:

Assuring the superior performance of any Hunter machine are the key factors of research . . . development . . . engineering . . . and design by a manufacturer engaged for 113 years in textile machinery development exclusively. Through *specialization* in this one industry, the James Hunter Machine Company and its subsidiaries have developed a *diversified* line of products, to increase production . . . improve quality . . . and introduce new economies to modern textile operations. The products illustrated are representative of a broad line of Hunter items used by the textile industry today, with the full assurance that BUILT BY HUNTER . . . IT'S DEPENDABLE!

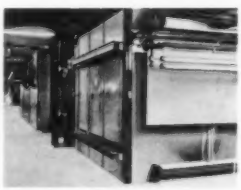


3-Apron Stock Dryer



Tenter Dryer

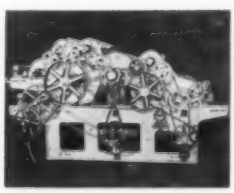
Vapojet Dryer



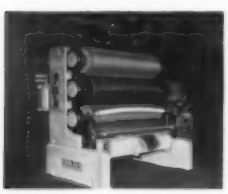
Curing Oven

We Look Forward to Seeing You at the
AMERICAN TEXTILE MACHINERY EXHIBITION
Atlantic City Convention Hall, May 23-27
Visit us at Booths 252-265 and 120-122

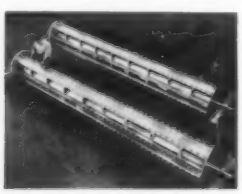
Needle Loom, Model 8



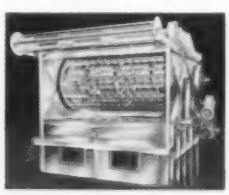
Imperial Garnett



3-Roll Pad

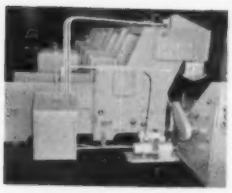


No-Lap Reels



Dye Kettle, Model S

Open Width Compartment Washer

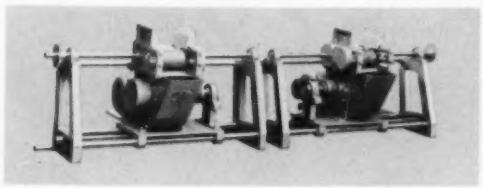


Fiber Meter

Imperial Feed

FIBER PROCESSING EQUIPMENT MADE BY...

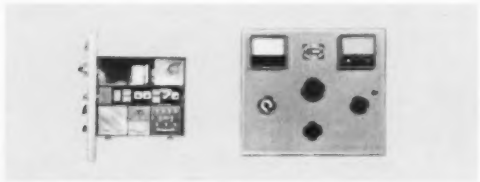
JAMES HUNTER INCORPORATED



End Trim Picker, Model TSR-J

FIBER PROCESSING EQUIPMENT MADE BY..

LOS ANGELES HUNTER FIBER MACHINE CO. CALIFORNIA

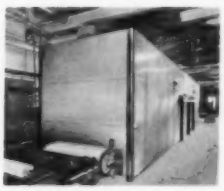


Modular Psychrometer

MOISTURE MEASUREMENT AND CONTROL EQUIPMENT MADE BY...

HUNTER CONTROLS

Uniflow Single Pass Pin Tenter Dryer



Non-woven Dryer

DRYING MACHINERY MADE BY...

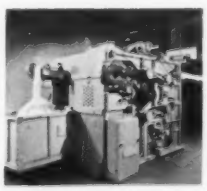
JAMES HUNTER MACHINE CO. Hunter NORTH ADAMS, MASS.

Sisal Pad Production Equipment

3-Cylinder Twin Doffer Garnett

GARNETT AND FIBER PROCESSING EQUIPMENT MADE BY...

JAMES HUNTER MACHINE CO. Hunter NORTH ADAMS, MASS.



Continuous Burr Crusher

Cascade Washer

WET FINISHING EQUIPMENT MADE BY...

JAMES HUNTER MACHINE CO. Hunter NORTH ADAMS, MASS.

Field-Based HUNTER Sales Engineering Service Brings Expert Counsel to You

Call a Hunter Sales Engineer first, for a better solution to your textile finishing, drying and fiber processing problems. Hunter Sales Engineers in the North, the South and the West are equipped to give you constructive assistance in the selection and use of the DEPENDABLE Hunter equipment listed below.

WET FINISHING EQUIPMENT

Crabbing Machines
Dye Becks
Dye Kettles
Top Dyeing Machines
Pad-Steam Dye Ranges
Extractors
Fulling Mills
Padders
Quetsches
Reels
NOLAP Reels
Squeeze Rolls
Saturators
Scutchers
Cloth Shrinking Ranges
Soaping Machines
Acid Tanks
Stainless Steel Tanks
Cloth Washers
CONEREEL Rope Washers
Continuous Cloth Washers
Open Width Washers
Slack Loop Washers
Wool Washers

DRYING EQUIPMENT

Cloth Carbonizing Equipment
Stock Carbonizing Equipment
Conditioners
Cooling Units
Apron Dryers
Stock Dryers
Tenter Dryers
"Jet Stream" Tenter Housing
Straightaway Pin Tenters
Tenter Overfeeds
Tier Dryers
Tensionless VAPOJET Dryers
VAPOJET Predryers
VAPOJET Dryer Housings
Finishing Ranges
Curing Ovens
Cloth Shrinking Ranges
Tenter Housings
Non-Woven Dryers

GARNETTING EQUIPMENT

Garnetts and Garnett Reclothing
Needle Felting Machines
Imperial Feeds
Lappers
Compressor Heads
Floor Aprons
Disc Cutters
Batt Folders
Conveyors
Dusters
Condensers
Pickers
Shredders

FIBER BLENDING EQUIPMENT

Fiber Meter
Imperial Card and Garnett Feed
Tandem Feed
Volumetric Feed
Unitint
Inclined Openers
Drum Blenders
Conveyors
Baling Presses

NON-WOVEN EQUIPMENT

Needle Felting Machines
Dryers
Garnetts
Lappers
Imperial Feeds

AND . . .

Chinchilla Machines
Automatic Feeds
Cloth Folders
Crush Rolls
Rolls—Rubber and Metal
Wool Openers
Materials Handling Systems
Expanders
Flexspools
Psychrometers
Fuller Pumps
ETC.

The new home of James Hunter, Incorporated in Mauldin, S.C. The increased demand for Hunter products in the South has resulted in the erection of this expanded, modern facility. In addition to fiber blending and feeding equipment, the plant produces the famous Leyland line of Expanders, Flex Spools, and other cloth handling equipment, custom-designed materials handling systems and baling presses.

"Built By Hunter . . . It's Dependable"

JAMES HUNTER MACHINE COMPANY

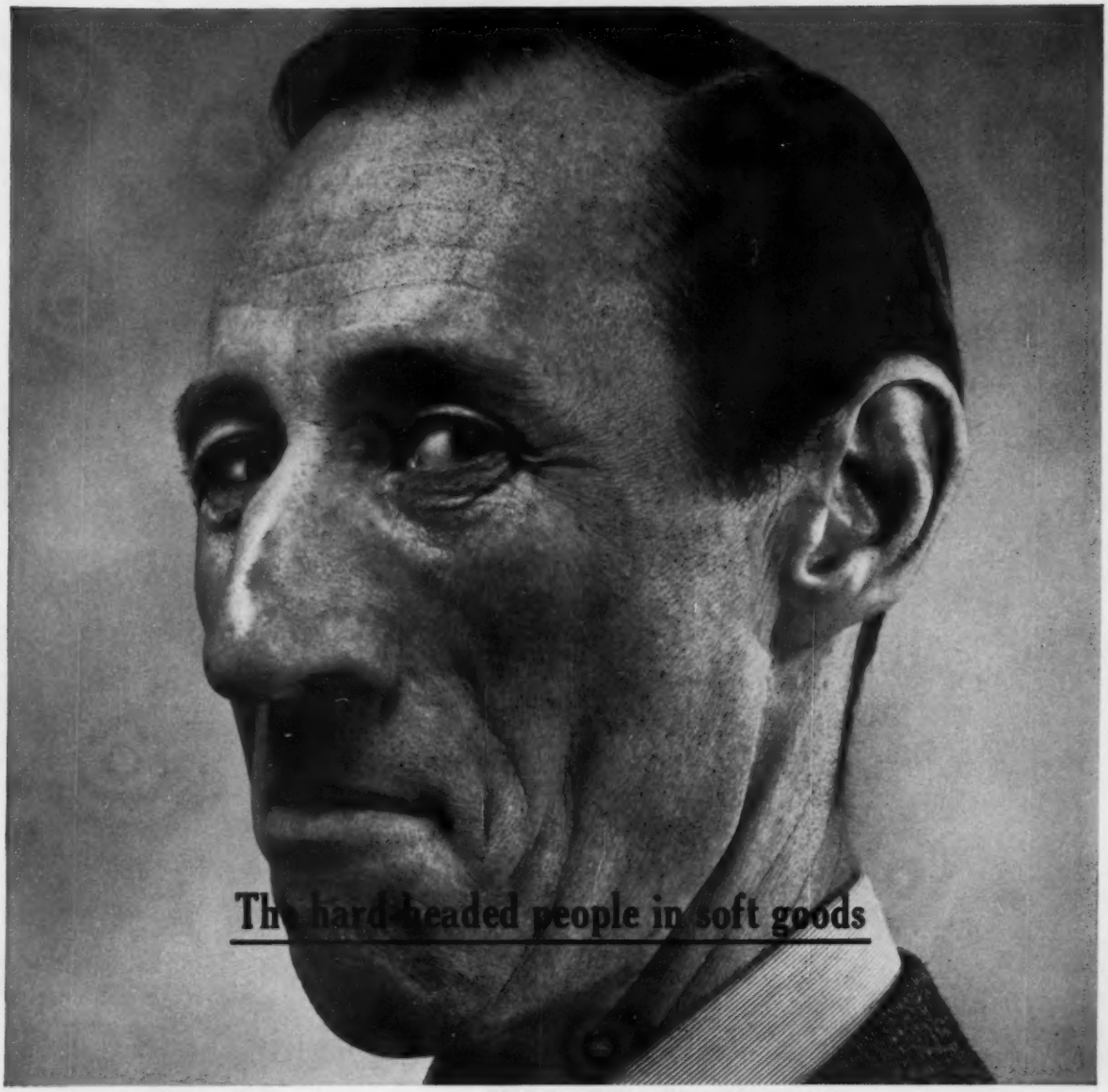
NORTH ADAMS, MASSACHUSETTS

Products: Textile Finishing Equipment, Garnetting Machines and Fiber Processing Equipment

JAMES HUNTER, INCORPORATED
MAULDIN, SOUTH CAROLINA
Products: Textile Fiber Feeding and Blending Machines, Flex Spools, Baling Presses, Expanders and Cloth Handling Equipment

HUNTER CONTROLS
NORTH ADAMS, MASSACHUSETTS
Products: Moisture Measuring and Control Equipment

HUNTER FIBER MACHINE CO.
LOS ANGELES, CALIFORNIA
Products: Fiber Preparation Equipment



are featuring fabrics made with Courtaulds' new forms of rayon

It's true! Courtaulds' extraordinary rayon fibers are enriching knits and wovens all over the market. Good in themselves, they're also great mixers. They give a beautiful lift to polyesters and acrylics, for instance, and reduce fuzzing and clinging in wash-wear blends with all synthetics.

And what wonderful individual qualities! Cross-linked Corval and Topel produce superb quality of hand, have a flair for luxury weaves and a thirst for color that puts new glow and go into merchandise. Solution-dyed Coloray creates unmatched colorfastness and delicious, downy texture. All three fibers take to all finishes—make all kinds of fabrics—and make them *better*. Make sure you feature the better fabrics made with Coloray, Corval and Topel!

COLORAY®
SOLUTION-DYED RAYON
CORVAL®
CROSS-LINKED RAYON
TOPEL®
CROSS-LINKED RAYON

Courtaulds (Alabama) Inc., *first in man-made fibers, first in cross-linking, first in solution-dyeing,* 600 Fifth Avenue, New York 20...Greensboro, N. C. ...Le Moyne Plant, Mobile, Alabama.

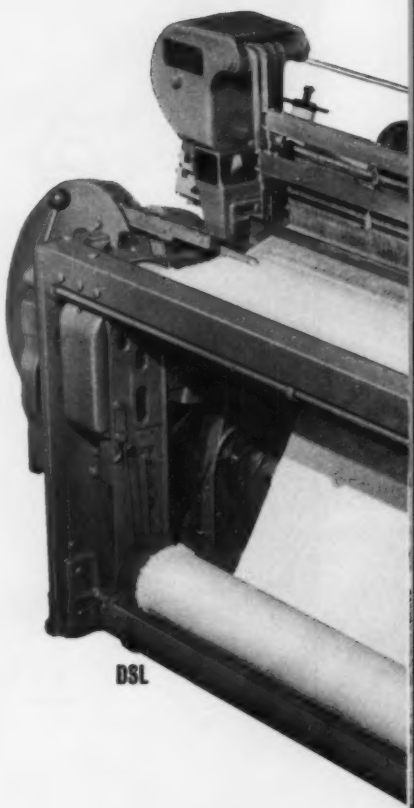
See Courtaulds' Exhibit, American Textile Machinery Exhibition, May 23rd thru May 27th, Booths 33, 34 • Atlantic City, New Jersey

IN ATLANTIC CITY

SEE

NEW ARRIVALS

in the family of DRAPER Looms



DSL

DSL

DRAPER SHUTTLELESS LOOM

a revolutionary break with convention

a new horizon in weaving

X-3

high speed versatility

new construction

improved performance

XB

rugged stability

mechanical excellence

planned economy

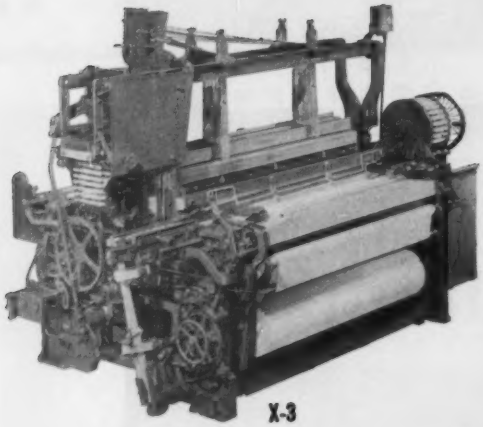
THREE BRAND NEW LOOMS

shown for the first time at

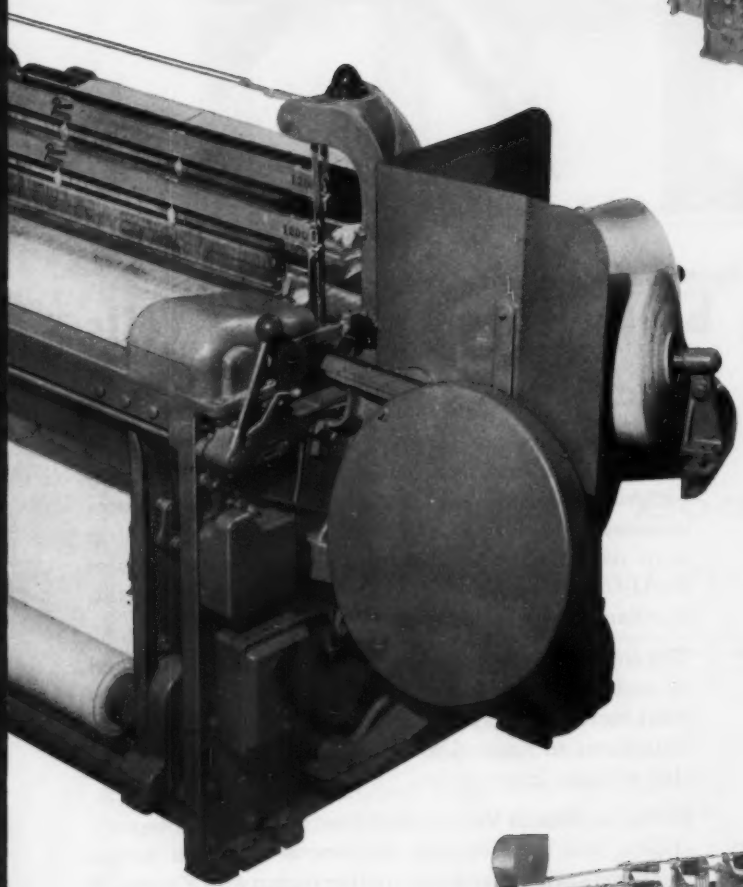
booth 439

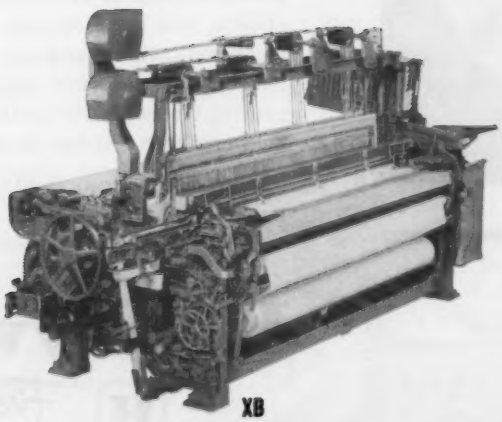
DRAPER CORPORATION

HOPEDALE, MASS. • ATLANTA, GA. • GREENSBORO, N. C. • SPARTANBURG, S. C.

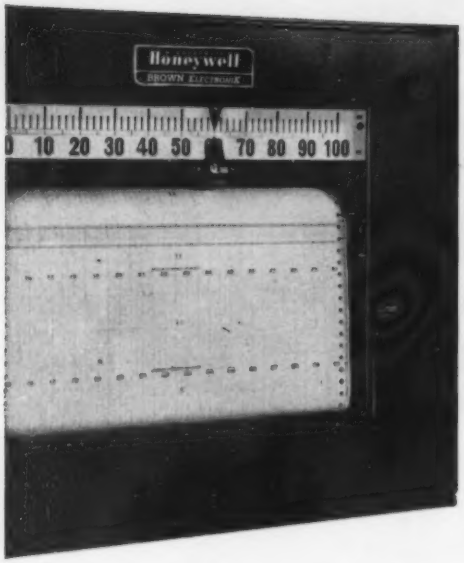


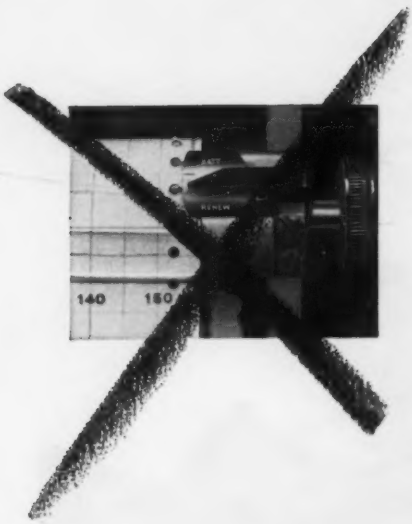
X-3



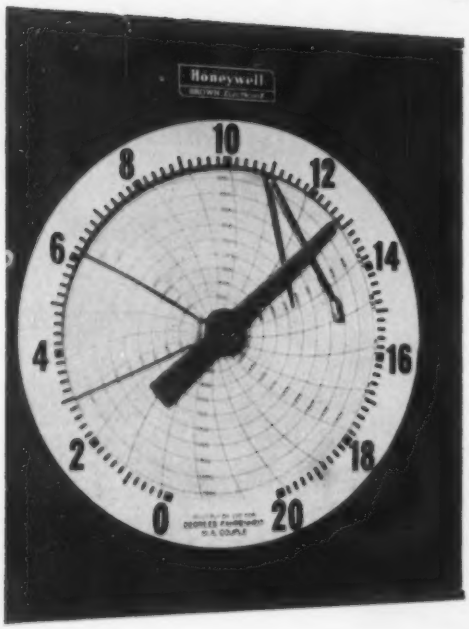


XB





NOW! no batteries or standard cells in *ElectroniK* potentiometers



The new Honeywell Continuous Voltage Stabilizer makes batteries, standard cells, and standardizing mechanisms unnecessary in new Brown *ElectroniK* circular or strip chart potentiometers. This new unit accurately regulates the D-C reference voltage supply to the measuring circuit. Standardization is no longer necessary.

The small compact stabilizer unit uses Zener diodes and an ambient temperature compensator to deliver a constant rectified voltage from line supply. This enables the instrument to respond to changes in the measured variable without interruption.

Each Continuous Voltage Stabilizer means more dependability, less maintenance, continuous attention to the measured variable, and still another reason why *ElectroniK* instruments are your best value in measurement and control. Get complete details from your nearby Honeywell field engineer . . . he's as near as your phone.

MINNEAPOLIS-HONEYWELL, Wayne and Windrim Avenues, Philadelphia 44, Pa.

Honeywell

First in Control

SINCE 1885

75th YEAR PIONEERING THE FUTURE

FEATURE ATTRACTION

FIFE

AUTOMATIC WEB GUIDING EQUIPMENT

WITNESS AN ACTUAL DEMONSTRATION

American Textile Machinery Exhibition

International Booth 655-658

ATLANTIC CITY CONVENTION HALL, May 23-27

FIFE

has solved successfully and practically every conceivable type of automatic, flexible material guiding problem. FIFE automatic guiding components include:

KAMBEROLLER®
Patent No. 2797091

AUTOMATIC POWER UNITS
SINGLE AND MULTIPLE

SHIFTA-ROLL CRADLES

MANUAL-AUTOMATIC POWER UNITS

For the most accurate automatic edge guiding or center guiding in the world of *Papers — Films — Foils — Laminates — Textiles — Tire Cords — Synthetics — Rubberized Fabrics — Fiberglass — Foams.*

Sales & Service

IN ALL PRINCIPAL CITIES IN THE UNITED STATES

EASTERN CANADA:
W. J. Westaway Co., Ltd.,
Hamilton, Montreal, Toronto

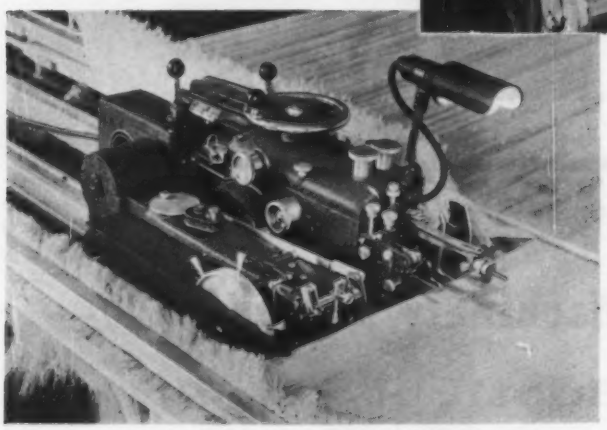
WESTERN CANADA:
Industrial Packaging Installations, Ltd.,
Vancouver, Winnipeg

UNITED KINGDOM and EUROPE:
Beasley, French & Co., Ltd., Licensee,
Bristol, England

• FIFE • MANUFACTURING Company

P. O. BOX 9815 OKLAHOMA CITY 18, OKLAHOMA

THE TITAN WARP TYING MACHINE



TIES WARPS EASIER — FASTER — MORE ECONOMICALLY!

TITAN Warp Tyers have won world-wide recognition for maximum dependability under all operating conditions. Backed by many years of specialized technical knowledge in warp tying, mill-tested TITAN units are modern in all respects. Fabricated in stainless steel and chromium plated to eliminate all corrosion problems, all 3 TITAN models assure maximum efficiency, ease of operation, and lowest maintenance costs.

TITAN machines work equally well with all types of warps — **permitting easier and faster preparation of warp and pattern.** Tying is performed effortlessly without stumbling or fumbling — knots are passed through smoothly and quickly because tails adjust readily to varied yarn counts.

You can depend on TITAN for superior performance on all counts, including prompt spare parts and unexcelled engineering service. PRODUCTION-WISE or SERVICE-WISE you can't beat TITAN — ask the mill which has one.

You can see the latest model TITANS in actual operation at the AMERICAN TEXTILE MACHINERY EXHIBITION, Atlantic City, N. J., May 23-27, Booths #1227-28 & 1310-11.

EDDA INTERNATIONAL CORP.

468 FOURTH AVE., NEW YORK 16, N. Y. CALHOUN TOWERS, GREENVILLE, S. C.

HARSHAW

Zinc Nitrate Flake

Readily Soluble
High Purity
Less Fines
Easy to Handle

Harshaw Zinc Nitrate Flake is especially suited for polymerizing resins currently being used for wrinkle-free and wash-and-wear fabrics.

Harshaw Zinc Nitrate Flake is produced under rigid control assuring the user of uniform resin catalysis at all times.

Harshaw Zinc Nitrate Flake measures about 3/32" thick by 1/2" long, thereby reducing dust and fines to absolute minumum.

Packed in 300 or 100 pound Leverpak drums with polyethylene liner, Harshaw Zinc Nitrate Flake is available for immediate shipment. Write for samples and prices.

TYPICAL AVERAGE ANALYSIS:

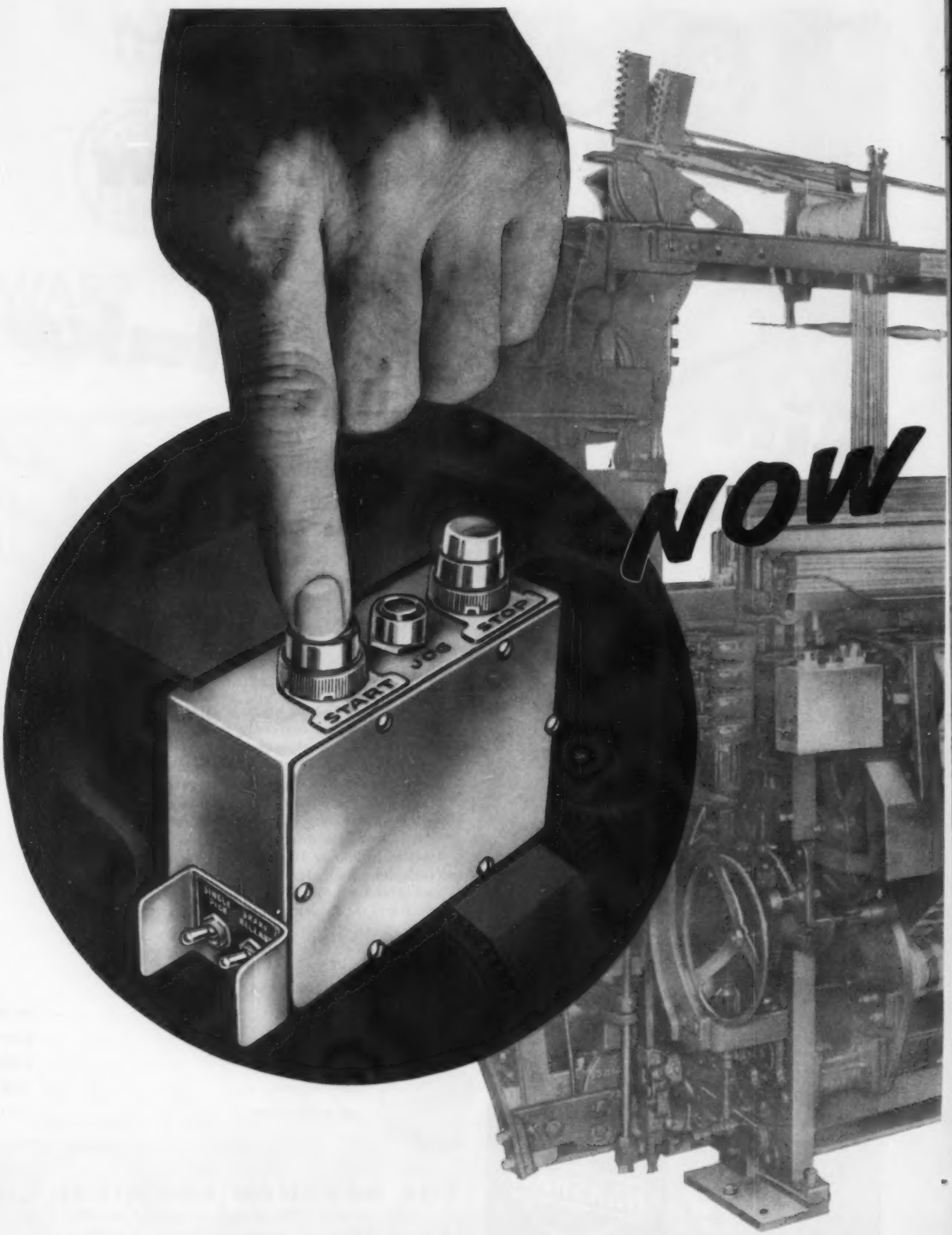
Zn	25.20%
Fe	0.001%
Pb	0.005%
H_2O Insoluble	.008%
pH of 5% solution	5.1

HARSHAW

THE HARSHAW CHEMICAL CO.

1945 E. 97th Street, Cleveland 6, Ohio

CHICAGO • CINCINNATI • CLEVELAND • DETROIT • HASTINGS-ON-HUDSON, N. Y.
HOUSTON • LOS ANGELES • PHILADELPHIA • PITTSBURGH



TRY THE SENSATIONAL NEW ELECTRIC CONTROL

RUN A LOOM YOURSELF

You're invited to operate any of the new C-7 Looms with the all-electric push-button controls at the American Textile Machinery Exhibition. See how easy it is to start, stop, jog reverse, or control a single pick operation. Three of these new looms will be ready for you to run, weaving fancy terry towels, a fine filament fabric, or synthetic dress goods.

Also see in operation the new C & K PAPA Loom (Pick And Pick Automatic) weaving upholstery fabric. Observe the high speed Needle Loom weaving two 1¼" wide elastic webs at the same time. Examine at eye level a 1304-hook double lift double cylinder Jacquard with the latest features in operation.

Let us demonstrate how C & K Looms of tomorrow can help you increase the efficiency of your mill today.

MANUFACTURERS OF THE WORLD'S LONGEST LINE OF AUTOMATIC BOX LOOMS

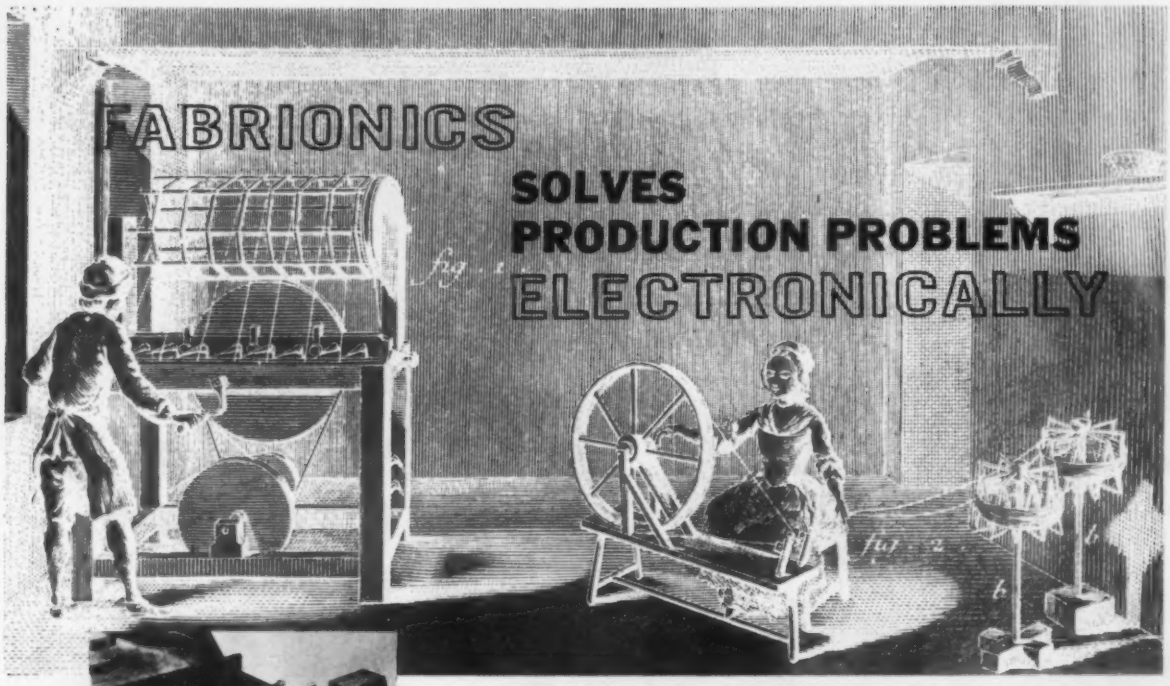
CROMPTON & KNOWLES CORPORATION
C&K
WORCESTER, MASS. U.S.A.

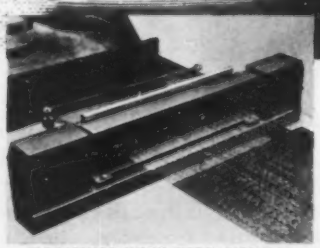
Charlotte, N. C. • Allentown, Pa. • Crompton & Knowles Jacquard Supply Co., Pawtucket, R. I.
Crompton & Knowles of Canada Limited, Montreal, Que.

YOURSELF ON THE C-7 LOOMS AT THE SHOW!

BOOTH NOS. 360-377

FABRIONICS SOLVES PRODUCTION PROBLEMS ELECTRONICALLY

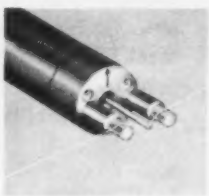




FABRIONICS WARP YARN MONITOR

Production and control problems that have plagued yarn and fabric producers for many generations are being solved today—electronically—by Fabrionics Corporation's engineering know-how. Fabrionics' specialized knowledge of both electronics and textile production has produced a variety of electronic equipment that, today, is lowering costs and increasing production for many of the largest yarn and textile producers in the United States and Europe. Fabrionics equipment for the textile industry includes:

THE FABRIONICS WARP YARN MONITOR: an electronic defect detector that catches all yarn defects – beam after beam after beam – with a minimum of resetting and operator attention. The Warp Yarn Monitor detects and counts defects above a preselected diameter and stops the warper so they can be removed. The addition of a portable accessory called the DETECT-ALL enables the Monitor to detect end breaks and linear defects above a preselected length and stop the warper for their removal. The DETECT-ALL also furnishes a running count, for quality control analysis, of all defects below the objectionable size.



ROTHSCHILD TENSOTRON

FABRIONICS WATCHMAN

THE FABRIONICS WATCHMAN: a multi-channel recorder that monitors your manually operated or automatic machinery and gives you a printed record, on a single 6-inch paper strip, showing exactly when 30 different pieces of machinery were running, when each was stopped, how long it was stopped, and what caused it to stop.

THE ROTHSCHILD TENSOTRON: a small, compact, portable thread tension gauge that electronically measures tensions as low as 1/10th of a gram. This precision instrument gives a continuous and permanent record of thread tension while introducing an absolute minimum of inertia and extra thread strain.

THE FABRIONICS UNA-MAG: an electromagnetic tension control that ensures uniform adjustable yarn tension. Easily installed on any disc-type tension device, the Una-Mag permits adjustment of tension up to 100 grams above the weight of the top disc, and one central panel can control the tension on a full creel of 1,000 ends or on any individual end. A simple adjustment compensates for the distance the yarn must travel from the rear to the front of the creel. In cone winding, the Una-Mag replaces the gate tensioning device and greatly reduces yarn scuffing as well as eliminating the high cost of maintenance of the gate device.

SEE THIS EQUIPMENT AT BOOTH 18A AT THE ATMA PARADE OF PROGRESS AT ATLANTIC CITY

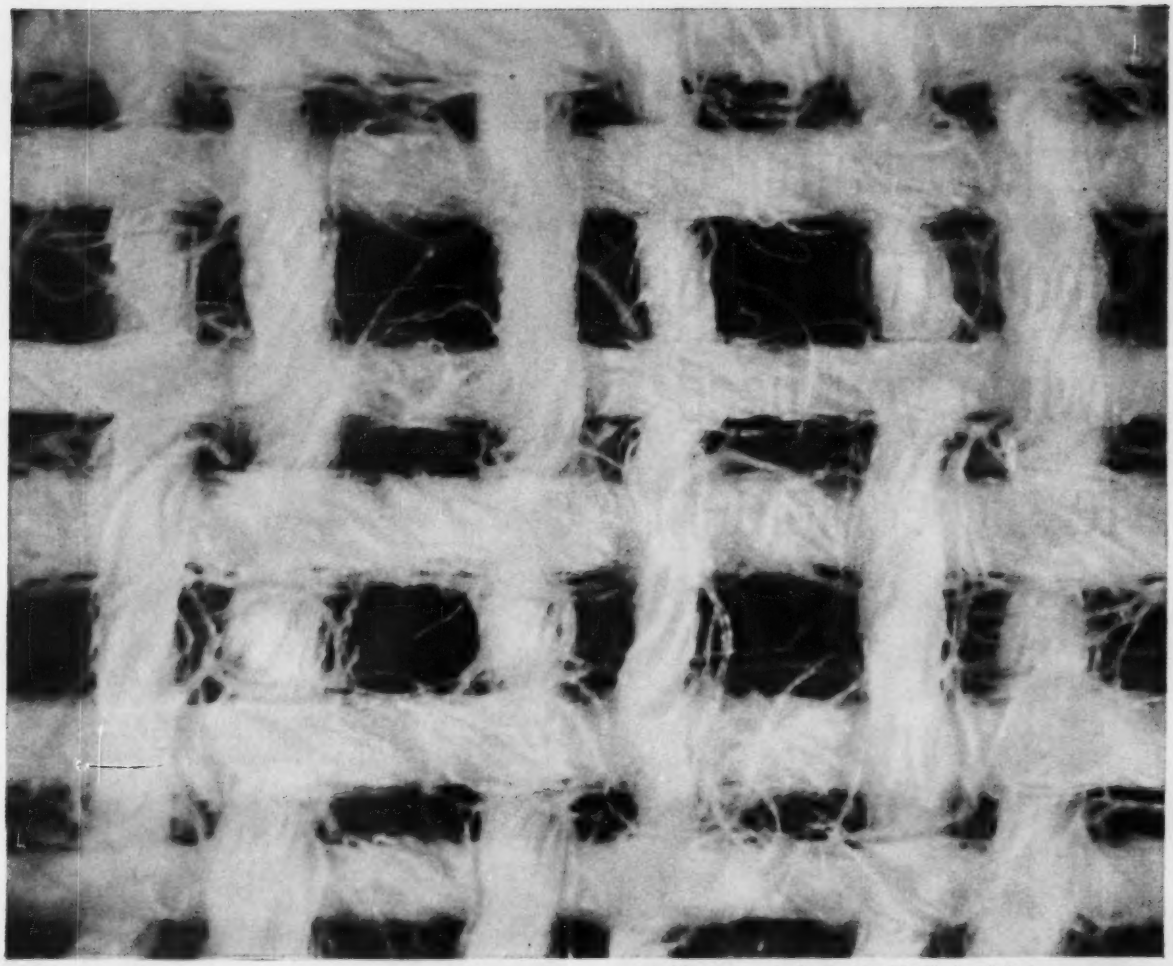
FABRIONICS UNA-MAG

THE ROTHSCHILD F-METER: for measuring coefficients of friction in winding, twisting, spinning, beaming and knitting machines. The portable, easily installed F-Meter permits accurate tension control by providing dependable measurements of the coefficient of friction between yarn and yarn guide. Errors are eliminated by automatic calculation and the results are shown in an easy to read display as well as printed on a permanent record for later analysis. The broad range of the F-Meter permits the measurement of coefficients for any angle of wrap from 0° to 3 times 360°.

ROTHSCHILD F-METER

These and other products of Fabrionics Corporation's electronic skills and knowledge of textile operations can save time and money for you, too. Write for detailed specifications and information on what Fabrionics' years of electronic experience and textile know-how can mean to you.

FABRIONICS CORPORATION
HUNTINGTON • LONG ISLAND • NEW YORK



Photomicrograph of cotton bleached with hydrogen peroxide

High-white and handsome!

Textiles with high whites and handsome colors usually have the most eye appeal. Shell Chemical products play an important role in the production of today's attractive and useful fabrics.

Hydrogen peroxide, a rapid, economical bleach, also finds use as a developer for vat dyes. In the production of minimum-care cotton fabrics, Eponite® 100 imparts wrinkle resistance. It also is an ingredient in an antistatic finish for synthetics.

The cotton fibers shown in the picture were mercerized for added luster. Another Shell product, hexylene glycol, was used as a penetrant in this process. Glycerine is a mercerizing assistant and a moisturizer in pigment printing. Shell Chemical alcohols and ketones find use as resin solvents and dye dispersants.

Choose the chemicals for your own process requirements from the column at the right. A Shell Chemical representative will be glad to discuss your specific needs. Write or phone your nearest Shell Chemical office for samples and technical literature.

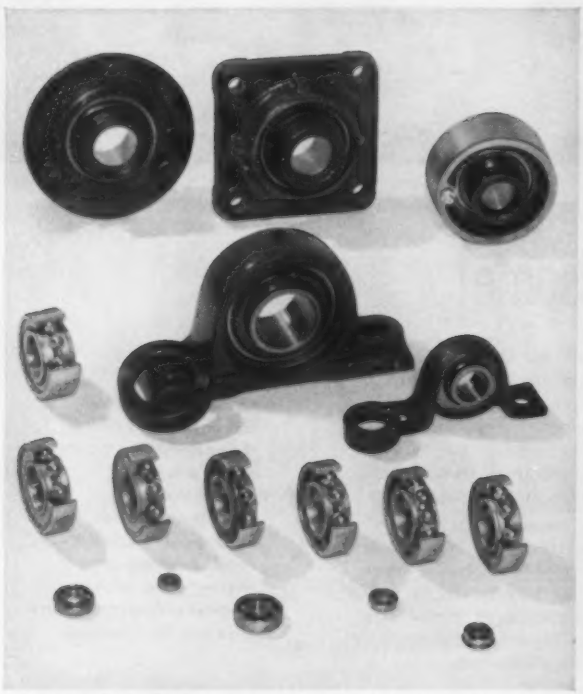
Acetone
Diacetone Alcohol
Epichlorohydrin
Eponite® 100
Ethyl Alcohol
Glycerine
Hexylene Glycol
Hydrogen Peroxide
Isopropyl Alcohol
Methyl Ethyl Ketone
Methyl Isobutyl Ketone
Sodium Sulfonates

SHELL CHEMICAL COMPANY
INDUSTRIAL CHEMICALS DIVISION

Atlanta • Chicago • Cleveland • Detroit • Houston • Los Angeles • Newark • New York • San Francisco
IN CANADA: Chemical Division, Shell Oil Company of Canada, Limited, Montreal • Toronto • Vancouver

See how Fafnir can "smooth the going" when you need textile equipment ball bearings!

Ball bearing experts to the textile industry — Fafnir's engineering files cover almost 40 years of service to the textile industry. Fafnir textile bearing specialists are familiar with your requirements . . . expert in handling them.



Over 10,000 types and sizes, including a variety of precision tolerances, in Fafnir Ball Bearings can often eliminate the need for "specials". Shown are basic radial bearings, extra-small bearings, and others with typical arrangements of seals and shields.

Capacity is equal to the heaviest demand! Fafnir is America's largest independent ball bearing manufacturer . . . a dependable source of supply. 26 branch offices, 18 warehouses. Over 1000 distributors for replacement needs. The Fafnir Bearing Company, New Britain, Conn.

ATMA

See you at Booth 282 and 283
American Textile Machinery Exhibition
Atlantic City May 23-27, 1960

FAFNIR
BALL BEARINGS

GAYLORD DEPENDABILITY
KEEPS YOUR PRODUCTION ROLLING

You get a clear track to corrugated boxes when you signal Gaylord to start the run. In all lines of industry, Gaylord has a well earned reputation for delivering the packaging . . . so you can package and deliver the goods . . . on schedule.

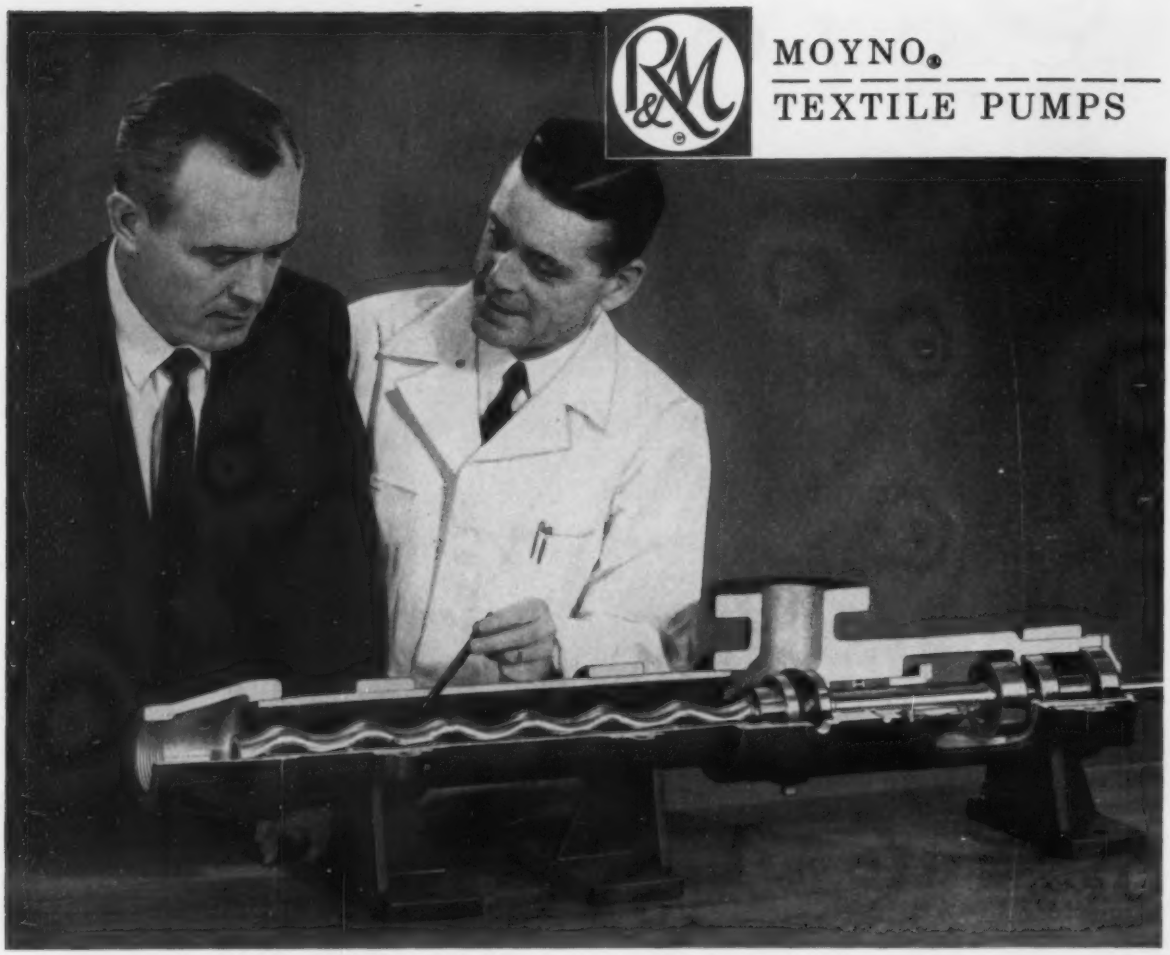
Regular corrugated containers in big volume runs, or engineered packaging, give your G-Man the green light . . . keep production rolling profitably.

CROWN ZELLERBACH CORPORATION
GAYLORD CONTAINER DIVISION

IN CANADA • CROWN ZELLERBACH CANADA, LTD. VANCOUVER, B. C.

HEADQUARTERS, ST. LOUIS
PLANTS COAST TO COAST

MOYNO®
TEXTILE PUMPS

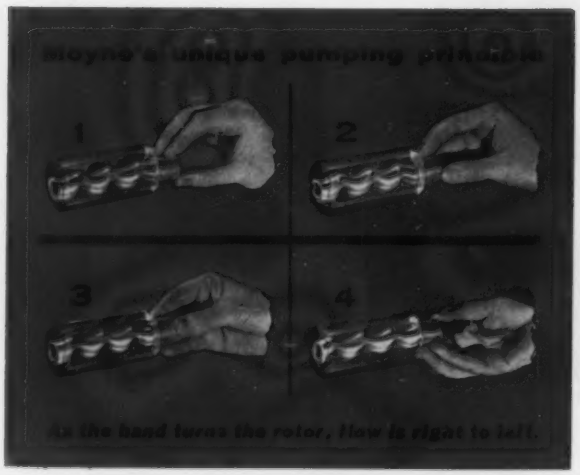


MOYNOS® Pump Highly Viscous and Corrosive Textile Liquids *Without Excessive Wear!*

MOYNOS pump any textile liquid that can be forced through a pipe! They handle highly viscous materials—thickeners, starch size and non-pourable pastes economically. They pump corrosive liquids—acid solutions, dye and chlorine—without appreciable pump wear. MOYNO can satisfactorily handle caustic alkali solutions and not cause foaming or aerating. In many textile mills, MOYNOS have cut downtime drastically on mercerizing and sizing machines when they replaced rotary pumps which wore quickly and lost capacity and suction characteristics.

This remarkable ability to pump textile troublemakers is explained by MOYNO's exclusive *"progressing cavity"* principle. As shown at right and in the cutaway model above, a screw-like rotor revolves in a double-threaded stator to form progressing cavities which move all fluids smoothly and evenly through the pump. Corrosion is no problem because both rotor and stator can be made of special resistant materials.

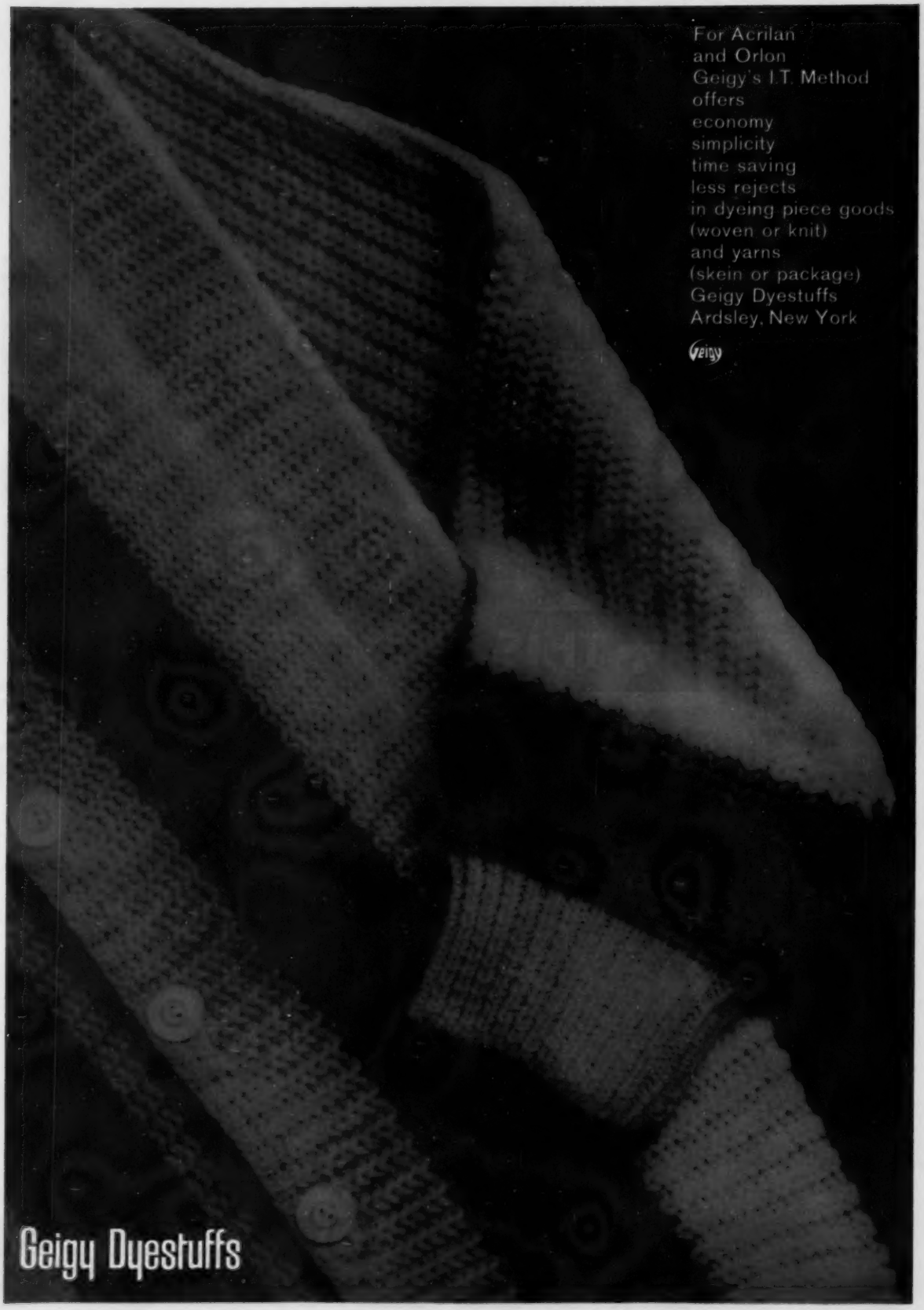
MOYNOS are available in capacities up to 500 gpm; pressures up to 1000 psi. Off-the-shelf replacement parts are always immediately available. For details on how MOYNOS can undoubtedly cut costs and improve liquid handling in your plant, write today for Bulletin 30-TI.



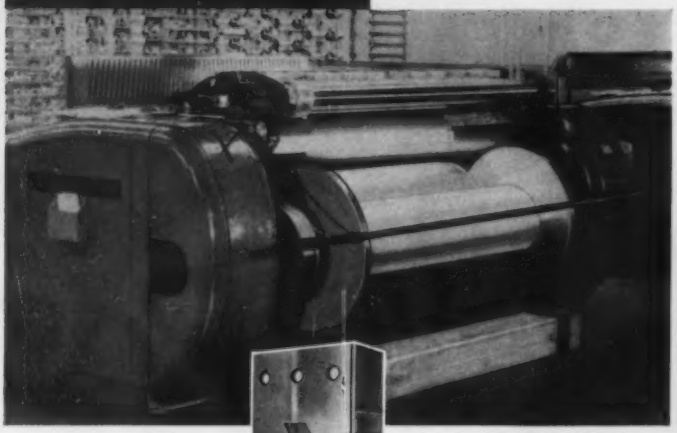
ROBBINS & MYERS, INC.

motors, household fans, Propellair industrial fans, hoists, Moyno industrial pumps

SPRINGFIELD, OHIO · BRANTFORD, ONTARIO


For Acrilan
and Orlon
Geigy's I.T. Method
offers
economy
simplicity
time saving
less rejects
in dyeing piece goods
(woven or knit)
and yarns
(skein or package)
Geigy Dyestuffs
Ardsley, New York
Geigy
Geigy Dyestuffs

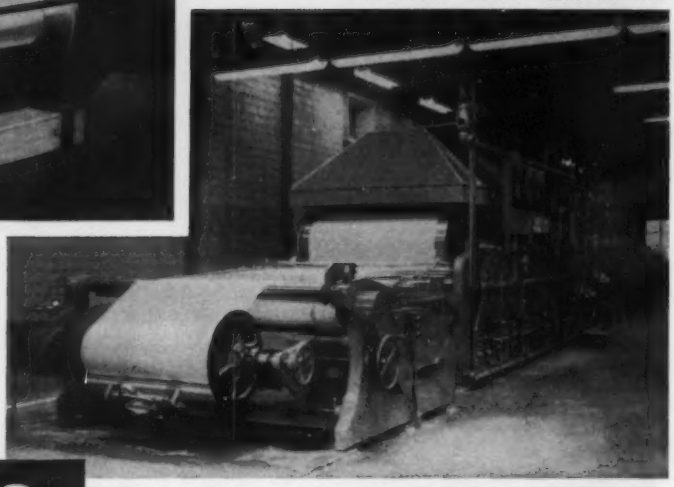
THIS



The Cocker **SD49** Warper and Creel

COCKER

The New Cocker **GH** Slasher



+ THIS

The Nemo Jet Cooker

+ THIS

= The World's FINEST Warp Preparation

ONLY COCKER has had experience in all types of warp handling problems, and only Cocker produces all types of warp handling equipment. You get the finest warps in the world with a co-ordinated all-Cocker installation.

- High Speed Rayon Warpers
- Slow Speed Rayon Warpers
- Slow Speed Cotton Warpers
- Ball Warpers
- Gas Warpers
- Snake and Link Warpers
- Vertical Cotton and Rayon Creels
- Horizontal Cotton and Rayon Creels
- Cheese and Spool Creels
- Special Jute Creels
- Nemo Jet Cooker
- High Speed Cotton Slashers
- High Speed Rayon Slashers
- Jute Slashers
- Carpet Slashers
- Tire Cord Slashers
- Heavy Duty Beamers
- Cooking and Storage Kettles
- Coiler and Snaker Motions
- Indigo Dyeing Machines
- Cloth Drying Ranges

47 YEARS IN THE SOUTH

Visit Cocker – Spaces 615 through 620 and 629 through 634 at the ATMA Exhibition

COCKER MACHINE & FOUNDRY COMPANY

IN CANADA: Contact W. S. Clark, Montreal, Canada, Oxford 7-2242

IN MEXICO: Ing. J. Via, Jr., I. La Catolica 45-911, Mexico, D. F.

PLANT & OFFICES at Ranlo, N. C. MAILING ADDRESS: Gastonia, N. C.

WORLD'S LARGEST DESIGNERS AND BUILDERS OF COMPLETE WARP PREPARATORY EQUIPMENT

GENERAL ELECTRIC
Offers a Complete Line of

ADJUSTABLE-SPEED DRIVES

MECHANICAL
ELECTRIC
ELECTRONIC

TO MEET EVERY APPLICATION REQUIREMENT

Horsepower
1/4 to 1250

TIMED OR CURRENT LIMIT
Acceleration or Deceleration

OPERATES FROM AC POWER SOURCE

R. P. M.
2 to 6000

SPEED RANGE
Up to 200:1

SPEED REGULATION
10% to 0.1%

Constant HP
Constant Torque
Or Both

Remote Preset Speed Control

SELECT YOUR DRIVES *from*
General Electric's Complete Line
Shown on the Following Pages

GENERAL ELECTRIC

GENERAL ELECTRIC *Adjustable-Speed Drives Offer* *A Great Opportunity*

POLYDYNE® DRIVE

Modern, a-c mechanical drive. ¼–25-hp. Speed range to 10:1. New "Equalizer"‡ provides smooth manual or automatic speed control. Produced by Gear Motor & Transmission Components Dept., Paterson, N. J. Write for Bulletin GEA-6806*.

‡ Pat. Pending.

THYMOTROL† *SPEED VARIATOR*

High-quality electronic drive. ¼–10-hp. Wide speed range. Small, lightweight. General Purpose and High Performance types. Write for Bulletin GEA-7018 and GEA-7019*.

KINAMATIC® *Speed Variator*

Industry's most versatile electric drive. 1–500-hp. Features Kinamatic motor-generator conversion. Speed range up to 200:1. Precise regulation. Regeneration. Wide variety of power unit, motor and control modifications available. Write for Bulletin GEA-6643*.

Industry's most complete line of modern packaged drives for every performance level, every price range

General Electric adjustable-speed drives are available for every performance level, every price range to help you boost output, improve quality, increase machine flexibility, reduce installation costs, cut your maintenance budget, add substantial profits to your business.

To make possible these advantages, your General Electric sales engineer is backed by an experienced team of adjustable-speed drive specialists—men who work constantly to help you get more out of your machines.

They offer an unbiased, analytical evaluation of your requirements—recommend the adjustable-speed drive that meets the demands of your application most completely and economically.

GENERAL ELECTRIC

to Modernize for Increased Profits

KINATROL✢
SPEED VARIATOR

Outstanding packaged drive value. Compact, versatile eddy current coupling. 3–100-hp. Stepless speeds 1½:1 to 17:1. 2% speed regulation. For complete information write for Bulletin GEA-6885*.

Parmatic
SPEED VARIATOR

Power amplistat conversion features hermetically sealed silicon rectifiers. 1–200-hp. Speed ranges to 200:1. Lightweight, quiet and vibrationless. Field proven. Write for Bulletin GEA-7012*.

** Write to Section 821-4, General Electric Company, Schenectady 5, New York.*

In Canada, write Canadian General Electric, Peterborough, Ontario.

✢ Trademark of General Electric Company.

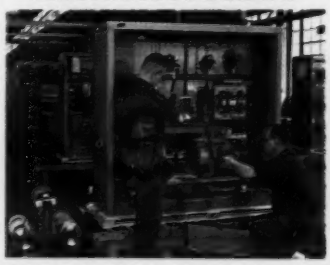
RESEARCH

In product research, G.E. invests more than three times the industry average. You benefit from the most modern features in your G-E drive.

ENGINEERING

General Electric industry and application specialists, familiar with your production process, assure proper selection and design of G-E adjustable-speed drives to meet your specific application requirements.

MANUFACTURING



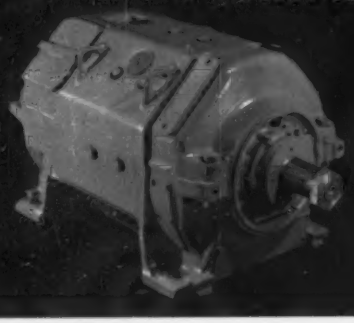
Skilled G-E workers, modern production facilities, standardized components and latest testing methods combine to give you high-quality, adjustable-speed drive equipment, shorter delivery time, lower prices.

SERVICE

G.E.'s service network offers three-way 'round-the-clock' assistance: start-up service, productive maintenance assistance and complete repair service.

MD ARMORED MOTORS

Industry's most preferred d-c mill motor. 500 to 625-hp. Write for Bulletin GEA-4654C*.



KINAMATIC® D-C MOTORS

Most modern, versatile d-c motor for adjustable speed. 1 to 200-hp. Write for Bulletin GEA-6335*.

AMPLIDYNE POWER AMPLIFIERS

Fast response d-c power source with flexible output characteristics. Write for Bulletin GEA-4053B*.

PLUS . . . *industry's most complete line of drive components for both general purpose and special industry application*

To learn more about the modern capabilities of G-E packaged drives and components, call your nearby General Electric sales engineer. ADJUSTABLE SPEED, a new booklet which outlines G.E.'s complete line of modern packaged adjustable-speed drives, is also available to help you modernize for profits. Ask for Bulletin GEA-6999*.

**** Write to Section 821-4, General Electric Co., Schenectady 5, N. Y. In Canada, write Canadian General Electric, Peterborough, Ontario.***

DIRECT CURRENT MOTOR & GENERATOR DEPARTMENT

GENERAL ELECTRIC

ERIE, PENNSYLVANIA

HEAVY DUTY M-G SETS

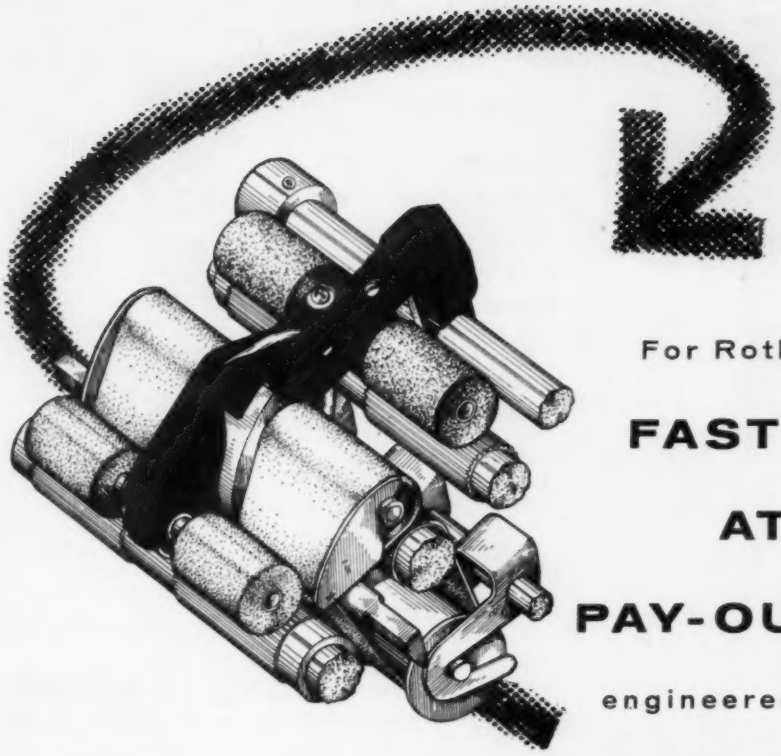
Reliable power conversion for main, auxiliary and process line drives

CD-1000 D-C MOTORS

Performance proved. Quality designed. 250 to 1250-hp. Write for Bulletin GEA-5497A*.

ALL-MOTOR GEAR-MOTOR

A-c or d-c. 1 to 75-hp. Simplified maintenance. Produced by Gear Motor & Transmission Components Dept. Write for Bulletin GEA-6704*.



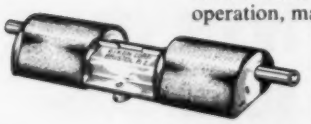
For Roth System Spinning...

FAST PAY-BACK AT MINIMUM PAY-OUT... with a Dixon engineered changeover plan

At Atlantic City
Booths 76, 77, 78

Dixon offers the perfect balance of a proven product plus engineering know-how . . . a combination which has produced many fast pay-back changeover plans for spinning mills*. Each Dixon plan is more than just equipment. Our engineers will gear the program to the mill's cash flow, helping to provide major economies on a systematic schedule.

While Dixon Spinning Changeovers are often installed complete in one operation, many mills take advantage of our multi-step changeover program.



On Roth System Frames, the usual plan calls for first adding new middle top rolls, aprons, and cages. Immediate cost-savings result through less lubrication, fewer laps and ends down, reduced cleaning . . . AND LONGER DRAFTS!

Systematic completion of the Double Apron Roth changeover can be made to suit the individual mill. The final Double Apron Roth changeover eliminates all oiling and cap bars, increases drafts, and gives our customers the most competitive spinning efficiency:

- Middle and back rolls run on RULON . . . the oil-free bearing that never is lubricated . . . outwears nylon 12 times.
- The Dixon patented self-aligning front roll rides on a hardened and ground, pre-lubed, sealed, precision ball bearing which is guaranteed for years and years and never requires lubrication.
- All parts are maintenance free. Pay-back on your investment is a matter of months.
- Productivity and quality improve. Yarn is cleaner . . . seconds decrease.

Compare "Pay-Out versus Pay-Back" on *both* Roth System changeovers being offered to the trade and you'll buy Dixon. Ask for our detailed report showing how an actual installation was completely paid for in 25 months and is now saving $1.50 per spindle per year by using Dixon Changeovers.

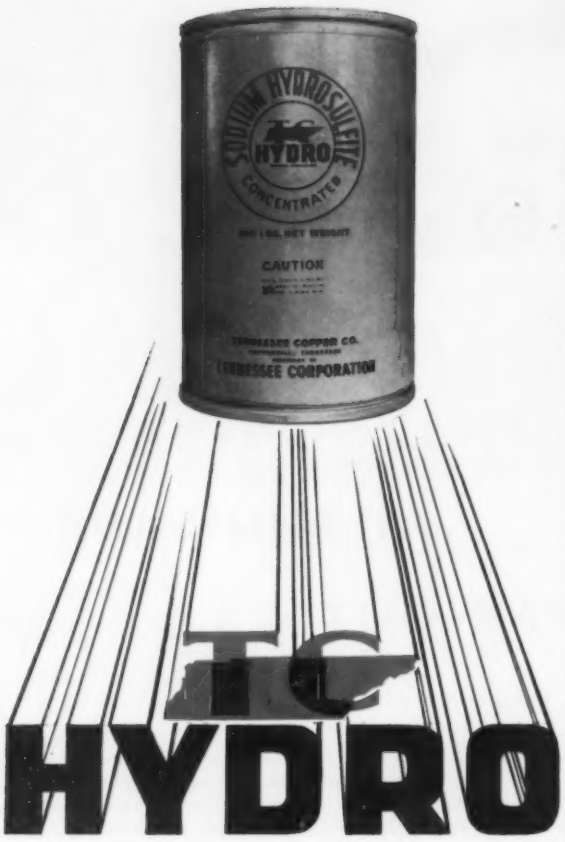
Dixon Corp., Bristol, R. I. — Charlotte, N. C. Southern Sales: Dunson & New, Inc., Box 9202, Greensboro, N. C.; Box 321, Greenville, S. C.; Box 445, West Point, Ga.

*Here are a few of the more than 2,000,000 spindles installed:

Mill	Spindle	System
J. P. Stevens	72,800	Double Apron Casablancas
American & Efird Mills, Inc.	40,678	Double Apron Casablancas
Chicopee Mfg. Corp.	272,032	Double Apron Roth and Casablancas
Pacolet Mfg. Co.	30,656	Double Apron Roth
Hartsville Manufacturing	23,520	Double Apron Roth

Dixon

Engineered spinning changeovers since 1876



TC HYDRO

Highest Quality Sodium Hydrosulfite

Our basic position in raw materials enables Tennessee Corporation to maintain a rigid quality control program from mining through finished product — Your assurance of Sodium Hydrosulfite of highest purity.

TC Hydro is non-caking, non-dusting and has excellent stability characteristics.

Packaged for safety and long storage in 250 pound drums.

We invite inquiries.

For complete listing of our products see our inserts in CHEMICAL WEEK BUYERS' GUIDE, Pages 173-176 or CHEMICAL MATERIALS CATALOG, Pages 551-554.

TC TENNESSEE CORPORATION
612-629 Grant Building, Atlanta 3, Georgia

JOHN P. NISSEN, JR., COMPANY
P. O. BOX 888 • GLENSIDE, PENNSYLVANIA • U. S. A.

Cable Address "NISSEN" PHILA.

• *for marking*

silk • plush • wool
nylon • rayon • cotton
orlon • worsted • underwear • jersey cloth
mixed goods

• *in dye houses*
• *bleacheries*
• *textile mills*

BALL | POINT

Nissen **all-purpose** marking inks

dye resist • fulling
bleach proof • caustic proof

writing | tubes

JOHN P. NISSEN, JR., CO.
Manufacturers • Textile Marking Inks
Glenside, Pa.

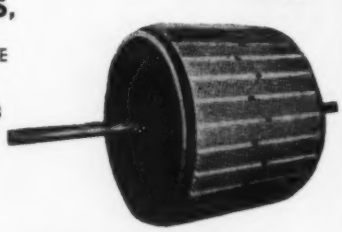
TRADE MARK REGISTERED

ATLANTIC CITY SHOW — BOOTH NO. 759

ALL TYPES OF PICKER APRONS, BEATER LAGS–

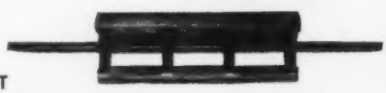
APRON SLATS, COMB BLADES,

W-3 WASTE MACHINE CYLINDERS . . .
KIRSCHNER AND H&B BEATERS . . .



NEW, REBUILT or EXCHANGED

Workmanship Guaranteed



MODERN PLANT
MODERN EQUIPMENT
EXPERIENCED PERSONNEL

WE INVITE YOUR INQUIRIES.

SMITH TEXTILE APRON CO., INC.
NEW DALLAS HIGHWAY
GASTONIA, N. C.
PHONES: UN 4-1106 or UN 5-5170

REDUCE
DOSAGE...
Says the Doctor
The New "M" Type Conical Ring
needs only drops of oil to produce
● More Uniform Lubrication Without Oil Waste.
● Longer Traveler Life.
● Longer Ring Life.
● Cleaner Yarn.
● Higher Spindle Speeds.
● Reduced Yarn Breakage.

The "M" Type Herr Conical Ring introduces a new, controlled method of lubrication. This outstanding improvement in ring lubrication is called Seam Lubrication — a method that utilizes the principle of capillary attraction. Thoroughly tested for several years in some of the largest textile plants, the "M" type Herr Ring provides more uniform lubrication than has been possible before. There is no oil waste. Every drop of oil is utilized being drawn by capillary attraction through the top and conical seams. There are no wicks that leak oil — no rewicking. The operation is clean. Maintenance costs are lowered. Oil consumption is greatly reduced, yet faster spindle speeds are possible without extra wear to ring or traveler. Write today to get all the facts that make new profits.

Oil is Supplied to Both Top and Conical Bearing Surfaces Through Seams.
Oil Flows to Annular Reservoir Within the Ring, Then is Drawn by Capillary Action Through Seams.

HERR MANUFACTURING CO., INC.

310 FRANKLIN STREET • BUFFALO 2, N. Y.

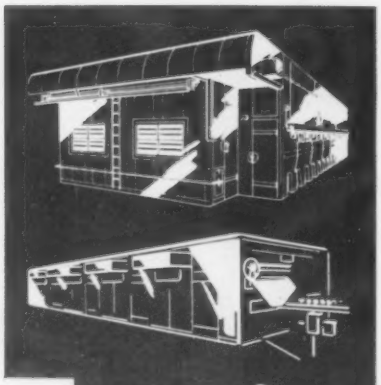
FOR SPINNING AND TWISTING WORSTED, WOOLEN, RAYON, NYLON, ORLON, FIBERGLASS AND BLENDED YARNS OF ALL TYPES

Visit us at our booth — 69 and 70 — at the Annual Textile Machinery Exhibit, Atlantic City, May 23-27.

Two Reasons Why the Textile Industry Looks FIRST to "NATIONAL"...

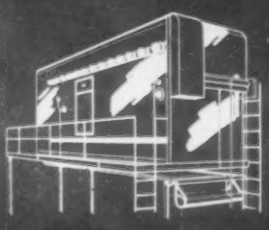
Leadership IN DRYING TECHNOLOGY PROGRESS

During the past forty years, "NATIONAL" research and design engineering have given to the Textile Industry consistently new concepts of drying procedures and equipment. Speed, efficiency and quality in the drying of textiles in all forms—from fibre to finished goods—have been revolutionized due in large measure to the patented features of "NATIONAL" design and construction.



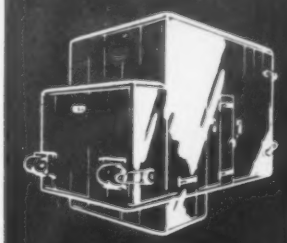
One Source FOR ALL TYPES OF DRYING EQUIPMENT

The list of "NATIONAL" dryers and conditioning units covers the full range of the Textile Industry's requirements—Loop, Print Goods, Tenter, Roll, Carpet, Skein, Yarn, Rayon Cake, Package Yarn, Stock and Swatch Dryers; Nylon Heat Setting Machines.



For Details... Visit us at the Exposition . . . . BOOTH No. 74-75

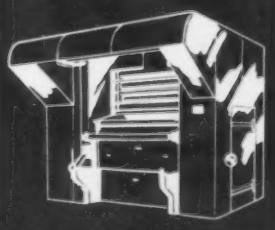
ATMA

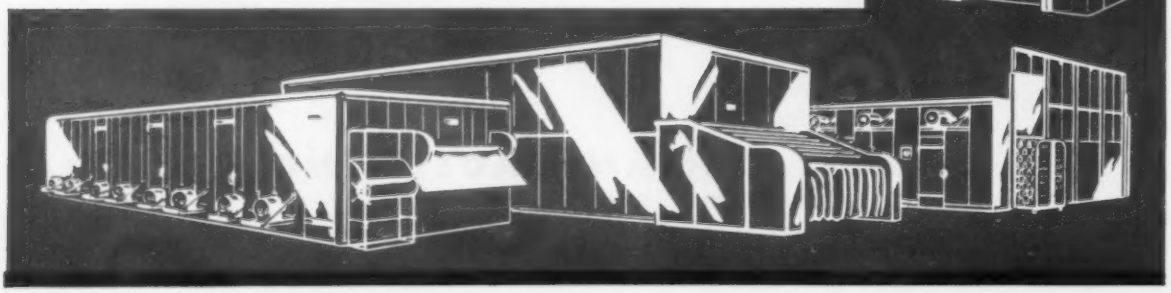


THE NATIONAL DRYING MACHINERY COMPANY

LEHIGH AVE. and HANCOCK ST., PHILADELPHIA 33, PA.

New England Agent: JONES & HUNT, INC., Gloucester, Mass. • *Southern Agent:* HAYES TEXTILES, INC., Spartanburg, S.C.
Cable Address: "NADRYMA"—W. U. Code





See it at the ATMA show—Booth 1402

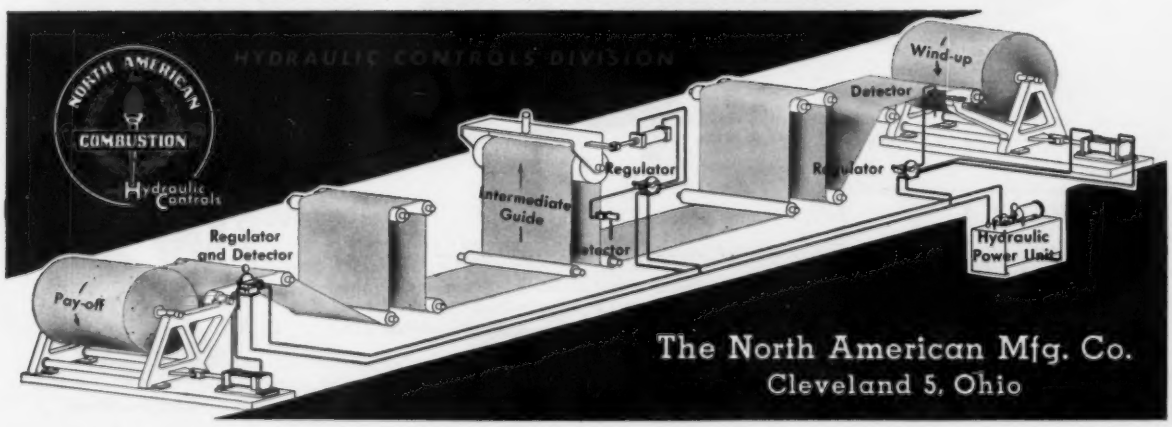
Now you can speed production, wind up perfect rolls reduce spoilage and offer more uniform goods by using North American CLOTH GUIDE CONTROL.

Ideal for tenter frames, inspecting machines, coating and marking machines, laminators, tubers, beamers, slitters, rewinders, etc.

Twin regulators keep pins or clips in alignment with both selvage edges; and keep production rolling smoother at higher speeds!

Learn how easily it can be installed on your machinery. See it at Atlantic City May 23-27, or write for free literature.

IDEAL FOR UNWINDING, REWINDING, OR INTERMEDIATE STEERING



PRODUCT QUALITY, OUTPUT AND PROFITS ALL RISE WITH WARNER & SWASEYS ON THE JOB

WARNER & SWASEY PACIFIC® CONVERTER
WITH HEAT-STRETCH UNIT

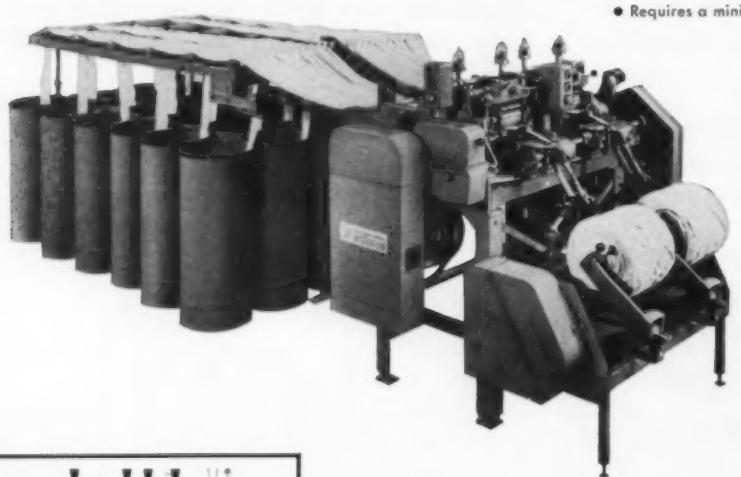
- Converts *all* types of synthetic tow to crimped sliver.
- Cuts and accurately blends synthetics or natural fibers.
- Eliminates blending, carding and gilling operations.
- Heat-stretch unit gives *controlled shrinkage* of high bulk fibers—unit can be added to all existing converters.
- High production—100 to 130 pounds per hour.

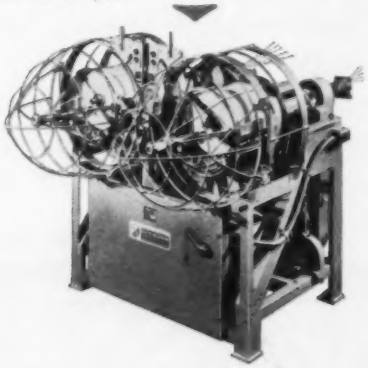
WARNER & SWASEY PIN DRAFTER® INTERSECTING DRAW FRAME
SINGLE HEAD—DOUBLE HEAD

- Single Head—single or dual can delivery, or balling head.
- Double Head—dual or quad can delivery, or balling head.
- Better balanced, 50% greater production.
- Speed of 1,500 drops per minute.
- Produces more evenly blended sliver up to 12 ounces.
- Handles wool, synthetics or blends.
- Applicable to French, Bradford, American or Jute Systems, and card room, comb room, or dye house operations.

WARNER & SWASEY WHIRLWIND® TWISTER WINDER

- More than doubles existing twisting speeds—twists up to 11,000 T.P.M.—winds up to 150 ys./min.
- 2 for 1 twist—.85 to 7.76 T.P.I.
- Handles natural and synthetic fibers.
- Large precision sales packages up to 30 lbs., either cone or tube.
- Requires a minimum of floor space.





ATMA
American Textile Machinery Exhibition – International
Parade of Progress
ATLANTIC CITY, U. S. A. MAY 22-27 1960

TEXTILE MACHINERY SALES OFFICES
Main Office and Factory: 5701 Carnegie Ave., Cleveland 3, Ohio
P. O. Box 215, 20 Chestnut Street, Needham 92, Mass.
P. O. Box 4000, 624 Pecan Avenue, Charlotte 4, N. C.
Suburban Square Bldg., Ardmore (Philadelphia), Pa.

W S ®

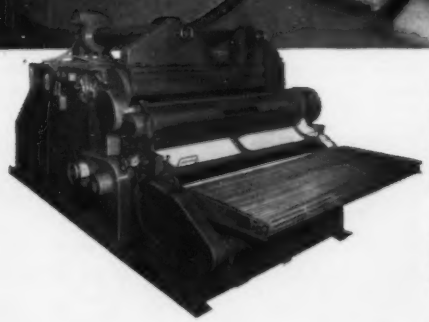
YOU CAN PRODUCE IT BETTER, FASTER, FOR LESS...WITH A WARNER & SWASEY

® Reg. U.S. Pat. Off.

"Visit our Booth #278"

ATMA
American Textile Machinery Exhibition - International
Parade of Progress
ATLANTIC CITY, U.S.A.
MAY 30-OCT. 1960

HUNDREDS OF NEW PRODUCTS
from RANDO-WEB® NONWOVENS
mean BIGGER PROFITS for YOU



Dress materials, drapes, fabrics, ties, disposable cloths, filters, shoe liners, rug backings, seed planters, chamois cloths, greeting cards, reinforcement for plastics, abrasive wheels and hundreds of other profitable products are being made with nonwoven materials from RANDO-WEB(S)®.

There is a RANDO-FEEDER® and RANDO-WEBBER® to fit most requirements in 40", 60" and 84" widths. There are no other machines in the world that can make uniform random webs like them.

The Curlator FIBR-SAVR, now available for these machines, gives added economy to the manufacture of nonwovens. It trims one or both sides of web or multiple slitting in any desired strip width and returns the trimmed (unbonded) fiber to the feeder for reprocessing.

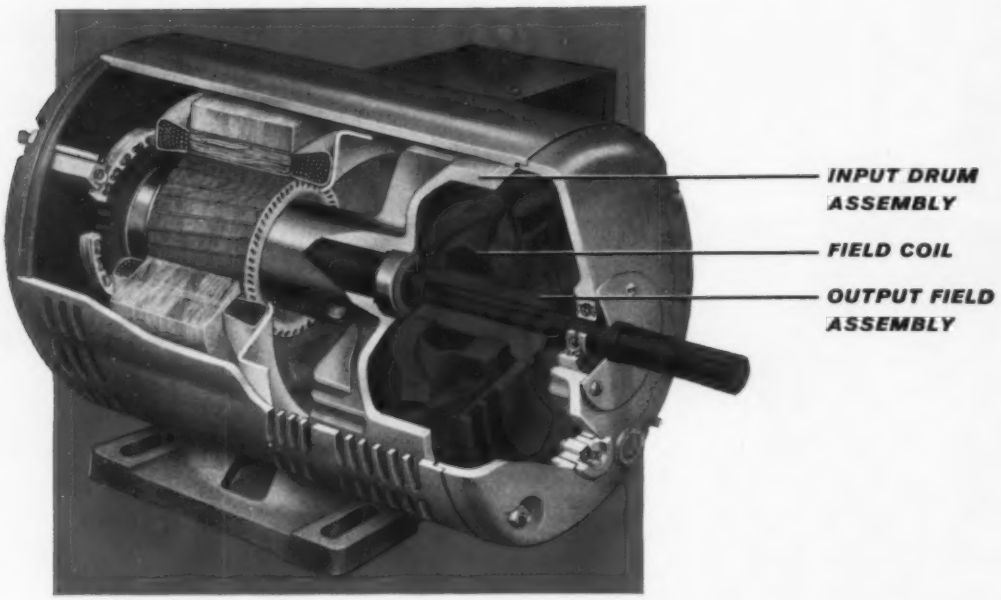
It will pay you to see webs made with natural or synthetic fibers or blends on the RANDO-FEEDER and RANDO-WEBBER.

Call or write us today for demonstration or Bulletin No. 105.

SOUTHERN REPRESENTATIVE:
Parrott & Ballentine, 3440 Augusta Rd.
Greenville, S. C.

EXPORT REPRESENTATIVES: Lendt & Company, 535 Fifth Ave., New York 17, N. Y.

TEXTILE DIVISION
CURLATOR®
CORPORATION
EAST ROCHESTER, NEW YORK



Get Stepless Adjustable Speed from AC Power

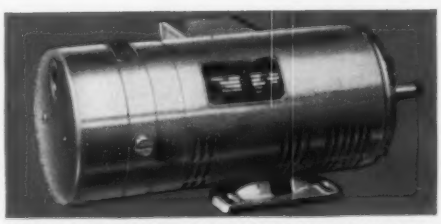
with DYNAMATIC® Fractional HP Ajusto-Spede® Drives

Wherever infinite adjustment and accurate control of speeds are required, Eaton-Dynamatic Ajusto-Spede Drives offer a simple, low-cost solution to the problem—stepless adjustment from zero to full output speed, and accurate control of any speed within the speed range.

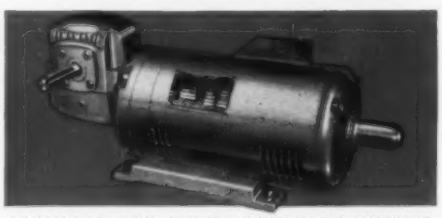
The Dynamatic Ajusto-Spede Drive is an integral combination of AC constant speed induction motor, eddy-current coupling, and plug-in type single-tube electronic control. Torque developed in the motor is transmitted to the driven member by electro-magnetic attraction; there is no mechanical contact between the driving and driven members.

Dynamatic Ajusto-Spede Drives operate on standard 115/230 volt, single phase, 60 cycle or 220/440 volt, 3 phase, 60 cycle alternating current—no special power source is required. Sizes are ¼, ½, and ¾ horsepower at 1600 RPM; ½, ¾, and 1 horsepower at 3200 RPM.

With standard, special, or remotely mounted transistorized control, Dynamatic Ajusto-Spede Drives offer many worthwhile advantages not found in other methods of speed control. Send for illustrated descriptive literature.



DYNAMATIC AJUSTO-SPEDE DRIVE WITH ELECTRICALLY OPERATED BRAKE. With the safety type friction brake, it is possible to achieve rapid deceleration and quick stop, thus providing fast cycling operation.



DYNAMATIC AJUSTO-SPEDE DRIVE WITH INTEGRAL SPEED REDUCER. Because of the variety of gear ratios available in the reducer, this compact assembly is adaptable to a wide range of slow speed applications.

EATON — DYNAMATIC DIVISION
MANUFACTURING COMPANY
3122 FOURTEENTH AVENUE • KENOSHA, WISCONSIN

ORIGINATORS OF EDDY-CURRENT SPEED CONTROL EQUIPMENT

LASTS 3 TIMES LONGER!

NEW DU PONT TEXTILE FLOOR FINISH

Resists chemicals, dirt, moisture, heat!

This weave room floor was redone with new Du Pont Textile Floor Finish ten months before photo was taken. Note the very high gloss, after severe abuse of heavy traffic and moisture. Regular sweeping has polished the finish so that it shines even more than when first finished.

Tests prove that this new oil-free clear floor finish has wearability and gloss retention three times greater than the finest varnishes. It requires dramatically less maintenance in textile plants—sticky accumulations of lint and starch don't stick to it! Under development both in Europe and U. S. for nine years, Du Pont's new Textile Floor Finish resists all kinds of wear. Hard, yet flexible, it resists corrosion, chemicals, solvents, water, abrasion, traffic, impact and high temperatures. It's ideal for concrete or wood floors. For complete information call your Du Pont representative or mail the coupon now!

THE PROTECTION LASTS WITH DU PONT TEXTILE FLOOR FINISH

DU PONT
REG. U. S. PAT. OFF.

BETTER THINGS FOR BETTER LIVING . . . *THROUGH CHEMISTRY*

E. I. du Pont de Nemours & Co. (Inc.)
Finishes Division, Dept. TI-95
Wilmington 98, Delaware

Gentlemen: Please send me, without obligation, technical information on the new Du Pont Textile Floor Finish.

Name _____ *Title* _____

Company _____

Address _____

See and Compare

the Advanced Features of

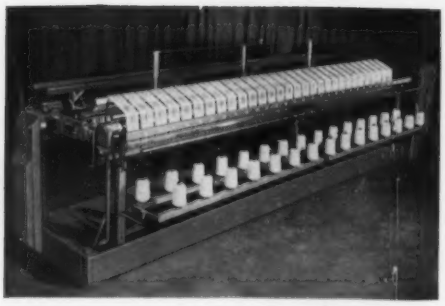
COSA TEXTILE MACHINERY

Booth 825

American Textile Machinery Exhibition

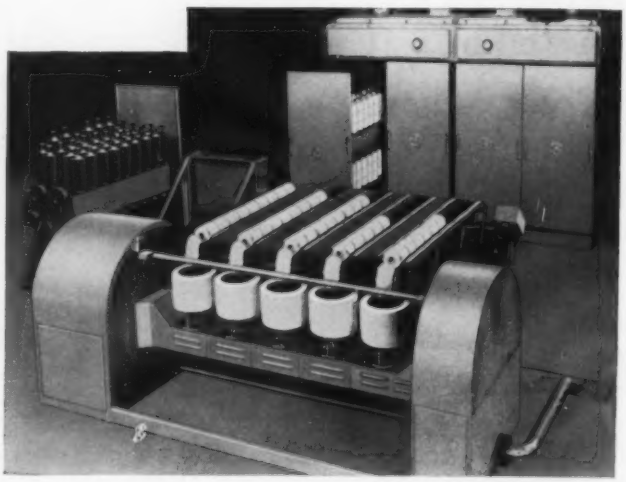
Atlantic City—May 23-27, 1960

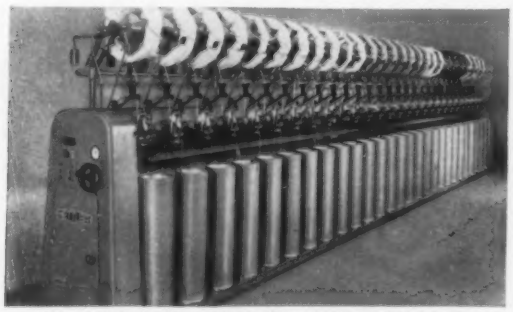
Don't miss the Cosa exhibit of precision textile machinery, in operation, at the Textile Show. These are the latest designs in textile machinery, to help increase production efficiency—and help you compete in today's textile market.



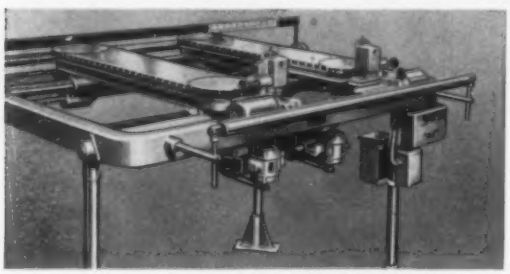
Croon & Lucke Reeling Machine—for rapid change reeling.

Scholl 5 Head "Secomat"—5 centrifuges and drying chamber for dyed or bleached yarn packages.

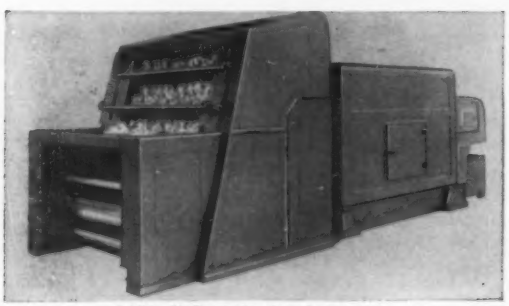




Mettler Skein to Can Winder—for tensionless handling of knitting yarns.



Erhardt & Leimer, Cloth Feed-in and stretching device.



Schilde, Air Penetration dryer for raw stock.

SEE ALL THESE NEW TEXTILE MACHINES AT THE COSA BOOTH

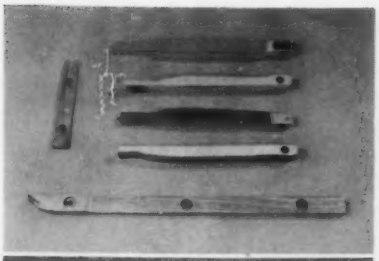
Arbach	Steaming & Finishing Machine
Stork	Model Rope-o-matic Washing Machine
Schilde	Air Penetration Dryer
Sahm	High Speed Precision Winders
Kettling & Braun	Napping Machine for Knitted Fabrics
Scholl	Package Extractor and Dryer—Laboratory Dyeing Machine
Erhardt & Leimer	Cloth feeders, Selvedge guides, Iron detector
Mettler	Skein to Can Winder, Yarn Singeing Machine, Doubler Winder
Croon & Lucke	Reeling Machines

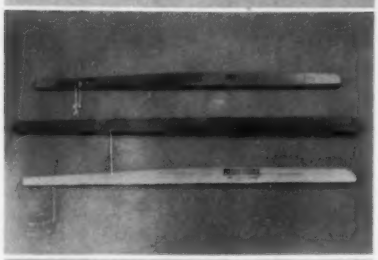
Cosa's world-wide sales and service organization assures maximum satisfaction on all installations.

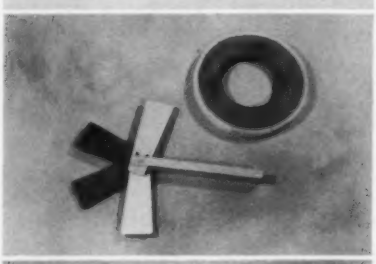
COSA **TEXTILE MACHINERY DIVISION**

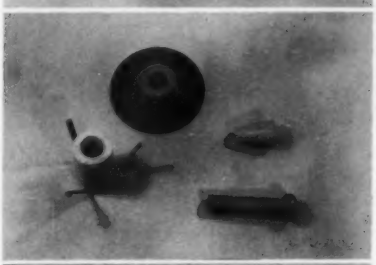
Lay-on-air & Tenter Dryers • Screen Printing Machines
Skein & Package Dyeing Machines • Decating & Other Finishing Machines • Precision Winding Machines

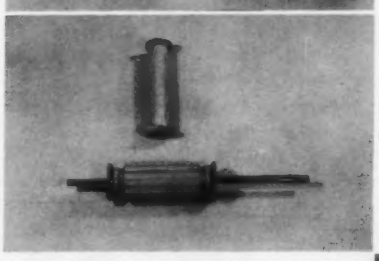
COSA CORPORATION, 405 LEXINGTON AVENUE, NEW YORK 17, N.Y.











GOOD WOOD!

Check your inventory on wooden parts:

Adapters & Cones

Battery Discs

Binders & Loom Swells

Clearer Boards & Rolls

Dobby Chain Cylinders

Harness & Dobby Sheaves

Jack Sticks & Parts

Lays & Lay Parts

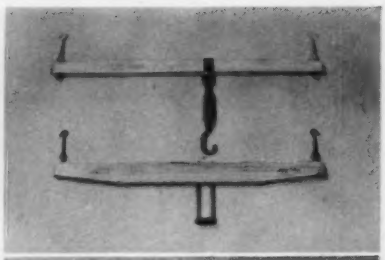
Handrails & Reed Caps

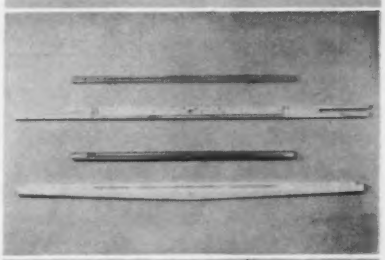
Leece Rods & Warp Clamps

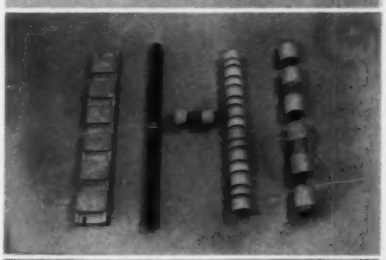
Loom Flags

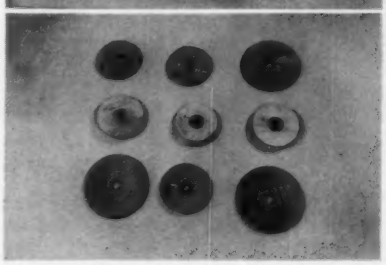
Lug Hold-ups, Blocks & Straps

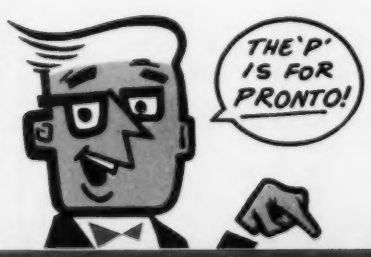
Pickersticks











CHECK BATSON for good wood parts. Let us prove to you that our fine quality woods, excellent workmanship, prompt delivery make Batson your best source for wooden parts. Phone Greenville CEdar 2-7691 and take the woe out of your woods.

P.O. Box 772
Greenville, S.C.

Louis P. Batson Company

". . . . and how's that new spot remover coming along . . . ?"

Success is sometimes behind you; especially when you call on someone who has had wet-processing experience for over half a century.

Call us on your problems; we may have a ready answer for you. If not, we'll get to work to get the answer.

For a direct line to our Customer Service Department, pick up the phone and call TRinity 6-1797.

Warp Sizing: *Softeners, Binders, Penetrants, Ty-In Penetrants, Shuttle Dressing, Waxes.*

Wet Processing Chemicals and Auxiliaries: *Dye Assistants, Penetrants, Rewetting Agents, Sanforized Fabric Oils, Detergents, Scouring Agents, Softeners.*

Niagara Twist-Setter: *Yarn Conditioning Penetrants.*

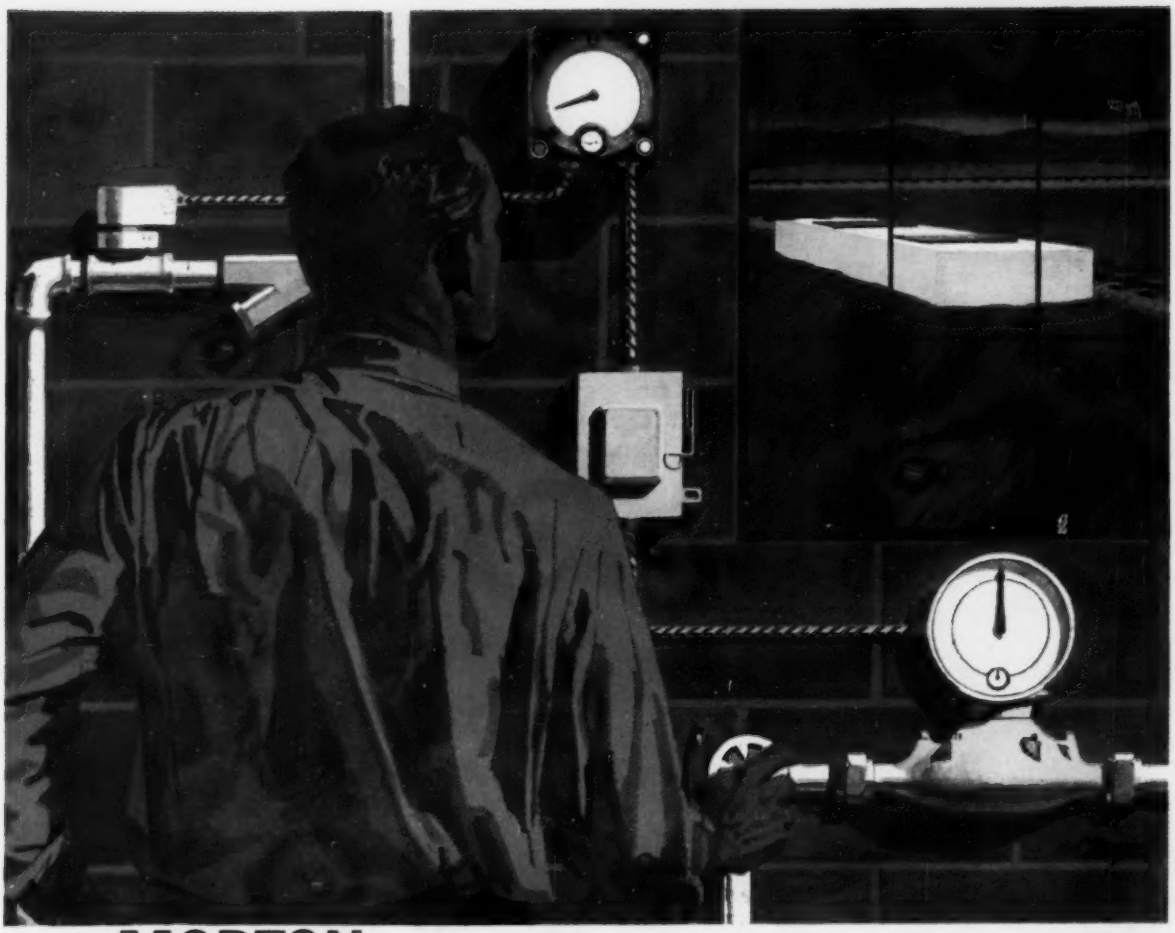
Seyco Warp Lubricator.

Headquarters for textile chemicals

SEYDEL-WOOLLEY & CO.

SEYCO

748 RICE STREET, ATLANTA, GEORGIA



New MORTON LEVETROL* system permits accurate brine measurement from inside your plant

***Levetrol** is a method of liquid level control which automatically replaces water needed in wet salt storage systems in proportion to salt withdrawn in brine form.*

Now you can accurately meter the brine you require and assure positive liquid level control from inside your plant—even if you use brine intermittently and in variable amounts.

With **Levetrol** you can use your present meter or a meter set up can be engineered for your plant with the help of a Morton Brine Engineer—and there's no charge for his services.

Adaptable to any wet salt storage system, Morton **Levetrol** protects you from salt losses due to brine overflow by constantly balancing the water level to the salt bed level.

Levetrol also ends the problem of corroding float valves. The simple, dependable **Levetrol** controls are installed on water lines located away from the wet salt storage. This completely avoids corrosion and assures proper brine strength at all times. With **Levetrol,** you have complete automation of your brine system from inside your plant.

Please send me, without cost or obligation, more information about the new Morton **Levetrol** System.

Name_____

Title_____

Company_____

Street_____

City_____ **Zone**____ **State**_____

Approx. size of wet storage system_____

*Pat. applied for

MORTON SALT COMPANY
INDUSTRIAL DIVISION

Dept. T15, 110 No. Wacker Drive, Chicago 6, Illinois

"EDDIE ADAMSTOP"

STOP

UNNECESSARY SNOWSTORMS

with *Adamstop*

instantly detects all roving failures and stops the frame

Adamstop detects end breakage automatically, and stops the frame before "snowstorm" reaction develops. Adamstop often has the frame stopped before ends are completely broken. Ends costly downtime. Adamstop increases production efficiency - - will pay for itself quickly by increasing output and increasing frame assignments while reducing waste and frame maintenance. Modernize your roving operations - - Choose Adamstop!

ADAMS, INC.

209 East Stone Ave., Greenville, S. C.

FOR PROMPT, EXPERT SERVICE AND RECOMMENDATIONS CONTACT

Expert Agent	Canadian Agent	Georgia-Alabama Agent	New England Agent
Joseph & Co., Inc. 535 Fifth Ave. New York 17, N. Y.	Steel Heddle Co. of Canada, Ltd. Granby, Quebec	Cecil A. McAbee 184 Heaton Park Drive Decatur, Ga.	Carmen-McCauley & Company P.O. Box 501 Pawtucket, Rhode Island

See it on the new Whitin Frame Booth 212 – Atlantic City.

Spintex

ANTI-FRICTION ROLLER BEARING

SPINDLES

TYPE M
TYPE HM
TYPE HF
TYPE HZ

made to specification for

TOP DRIVE WARP
TOP DRIVE FILLING
and
TWISTING

with Steel Driving Tip

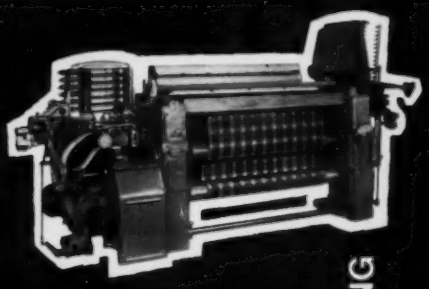
- Alum Adapter for Paper Tubes
- Steel Whorl
- SPINTEX Doffer Guard or WITHOUT DOFFER GUARD
- STEEL BASE
- KNEE BRAKE

Spintex

LENKOTEX COMPANY, INC.

136 Liberty St. • New York 6, N. Y.

ATLANTIC CITY EXHIBITION – BOOTH 663



SWISS TOP ENGINEERING

6 Shuttle

FULLY
AUTOMATIC
LOOM

SAURER

ADOLPH SAURER LTD.
ARBON / SWITZERLAND

Atlantic City, May 23 thru 27, 1960
American Textile Machinery Exhibition

SPACES: 1140 - 1144 / 1209 - 1215 STREET LEVEL

Parade of Progress

SEE
WORLD'S MOST ECONOMICAL
METHODS OF FILLING
PREPARATION
AND FINEST
BOBBIN CLEANING
AND HANDLING EQUIPMENT
IN OPERATION

BOOTHS 311-320

THE TERRELL MACHINE CO., INC.

CHARLOTTE, N. C.

NEWS IN BRIEF

Diversification Helps Dan River. Dan River Mills' policy of diversifying in both grey goods and finished goods was credited by president W. J. Erwin with making it possible for the company to post its most successful year of the past decade in 1959.

Wash-Wear Research at Lowell. New finishes to impart improved wrinkle resistance and wash-and-wear properties to cotton fabrics will be sought by research workers at the Lowell Technological Institute Research Foundation, Lowell, Mass., under a contract with the U. S. Department of Agriculture.

New Hosiery Patent. A new method of hosiery construction is covered in U. S. Patent 2,925,725, issued recently to George A. Urlaub of Queens Village, N. Y. The invention provides for the body portion of full-fashioned stockings to be knitted of two or more yarns and the selvage area to be knitted of a single yarn. This is designed to give a thinner, less bulky seam more comfortable to the wearer and less likely to become distorted or crooked.

Labeling Checkup Starts at Retail. The Federal Trade Commission is beginning at the retail level to check compliance with the Textile Fiber Products Identification Act, which became effective in

Tell them before it is too late

■ EVERY underdeveloped country in the world aspires to have industry. The first industry that these underdeveloped countries think of attracting is textiles. This is true for a number of reasons, the principal one being that the textile industry provides more jobs in relation to investment.

Japan has a rebuilt textile industry. India is in process of expanding hers. Korea, Formosa, and Pakistan are building mills. Mexico, most of the countries of Central and South America, and even parts of Africa have plans of becoming industrial areas and propose to take the first step in this direction by building textile mills. A portion of this development has been financed, and is still being financed, with American tax money.

The identical machines that we use in this country are available to these underdeveloped countries. Their wage rates are a small fraction of ours and they have a 25 per cent lower cotton cost. Eventually, the American people are sure to demand that at least a part of the American textile industry be kept alive. It can only be kept alive by limiting the amount of textiles which these low wage areas can ship here.

Many of these underdeveloped countries are our friends. If we permit them to go ahead and build up their textile industries with the expectation of supplying this market and then later, after they have trained their people and built mills to supply this market, take the market away from them, we will make bitter enemies around the world. How much better it would be for our Government to take preventive action now before thousands of additional textile jobs in this country have been liquidated, and before underdeveloped countries around the world have geared their economies to supply a market in this country which sooner or later the American people are going to demand be taken away.

I can think of nothing calculated to build more international ill will than, for example, to let our neighbor Mexico build textile mills, employ thousands of people in them, ship the product of their low wages and cheap cotton here, and then have this country create economic chaos in Mexico by placing an embargo on Mexican goods.

Up to now, our State Department has not shown much interest in saving American textile jobs. If they can be convinced that they are doing the underdeveloped countries a grave disservice by permitting these countries to build an industry on the expectation of supplying a market which they will later lose, the State Department may be willing to spell out now just how much of the American market is going to be given away.—*J. Craig Smith*, president, Avondale Mills.

EXECUTIVES ON THE REACH TOMORROW'S MARKETS TODAY

BEECHCRAFT SUPER 18

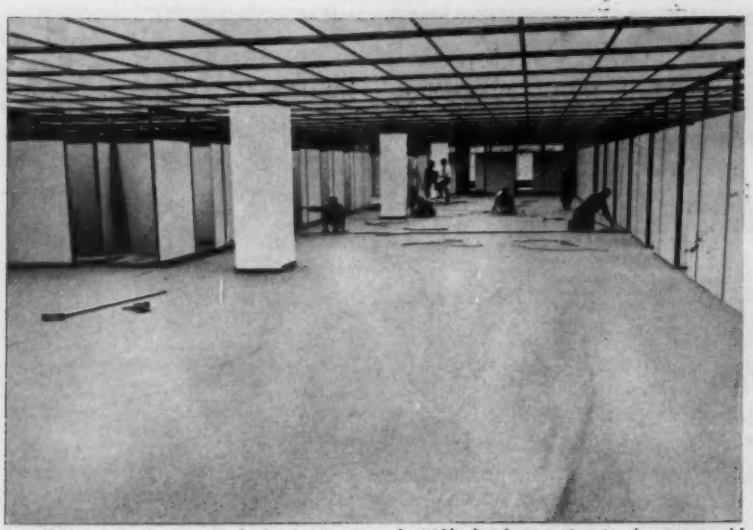
the mark of progressive management

Southern Airways Company

ATLANTA AIRPORT
ATLANTA, GEORGIA **TEL. POplar 7-3766**

Charlotte, N. C., Tel. FRanklin 6-7150 *Birmingham, Ala., Tel. FAirfax 2-0502*

Beechcraft AIRFLEET OF THE TEXTILE INDUSTRY



Installation crew lays part of about 15 acres of 100% dynel carpeting in the new world headquarters building of Union Carbide Corp. The carpeting was woven by James Lees and Sons Co.

March. FTC is expected to go back through the channels of distribution as far as is necessary to correct violations. At first there will be no heavy crack-down on violators of the Act, according to FTC officials; however, examples will

be made of those who deliberately violate the law.

Apprenticeship Schedules. Examples of apprenticeship schedules, covering trades in industrial maintenance including textiles, are given in a newly revised publication of the U. S. Department of Labor's Bureau of Apprenticeship and Training. Textile schedules in the book include Industrial Maintenance Electrician — Textile; Maintenance Machinist — Textile; Knitting-Machine Mechanic; Seamless-Hosiery-Knitting-Machine Mechanic; Millwright, Textile Machinery; and Textile Technician—Mechanic, covering card room, comb, drawing frame, mule spinning, ring spinning, spinning room, twister, warp preparation, and weave room. Copies of the book, "Selected Apprenticeship Schedules, Trade and Industry Publication No. 2, 1959 Edition," are available free from the Bureau at Washington 25, D. C.

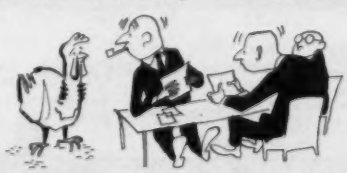
PTI to Offer Nontextile Curricula. The Philadelphia Textile Institute has announced a broadening of the courses offered to include several leading to degrees with nontextile majors. There will now be two management curricula offered, with textile courses optional in one; plus two curricula in college chemistry, one without textile application. A general engineering curriculum is being planned to parallel the textile engineering program now given. To describe the school's services more aptly, a change in name has been proposed.

Big Future for Nonwovens. Speaking at a recent meeting of the American Institute of Chemical Engineers, Richard E. Charlton, Jr., coordinator-development for the Lantuck Division of West Point Manufacturing Co., said, "Fiber-fabrics [his term for nonwovens] will replace woven fabrics, knitted fabrics, felts, battings, perhaps leather and some papers in many uses by doing a better job or by doing the same job for less money. However, I believe that substantial growth will come

Labor-Management News

Dan River, UTW Renew Contract. Dan River Mills, Danville, Va., and United Textile Workers of America have renewed their contract, which includes an across-the-board percentage wage increase, averaging about 7 cents an hour. It is estimated that the increase will up the company's wage bill by almost $1.5 million a year.

Interwoven, AFHW Agree. Interwoven Stocking Co., Martinsburg, W. Va., and American Federation of Hosiery Workers have

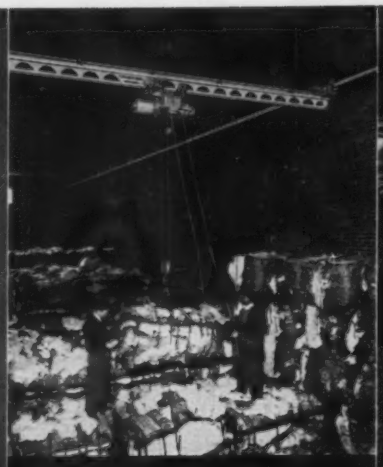


reached agreement on a new one-year contract. Provisions include addition of Thanksgiving Day as a paid holiday, and some changes in certain working conditions.

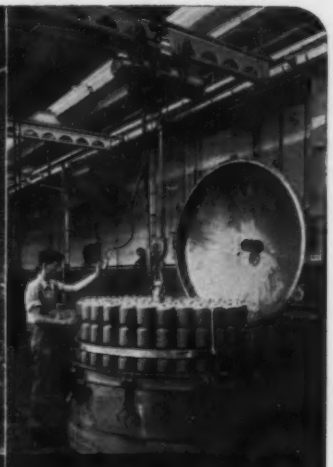
Union Claims Credit. Here is how *Textile Labor*, official publication of the Textile Workers Union of America, AFL-CIO, viewed the recent round of wage increases in southern mills: "Southern textile tycoons, under unrelenting pressure from TWUA, have grudgingly begun to grant wage increases. A massive leafleting campaign by the union, which saw close to two million leaflets distributed in front of over 500 unorganized mills, forced the reluctant hand of the prosperous textile industry . . . As they did last year, a number of major unorganized mills tried to take the sting from TWUA's drive by granting raises."

Court Awards Vacation Pay. Superior Court Judge Curran has awarded $12,718 to 250 employees of the former Greenwich Printing & Dyeing Co., East Greenwich, R. I. The sum covers vacation, holiday, and severance pay, plus interest accrued since the plant closed in 1957.

TO CUT OVERHEAD GO OVERHEAD with CLEVELAND TRAMRAIL

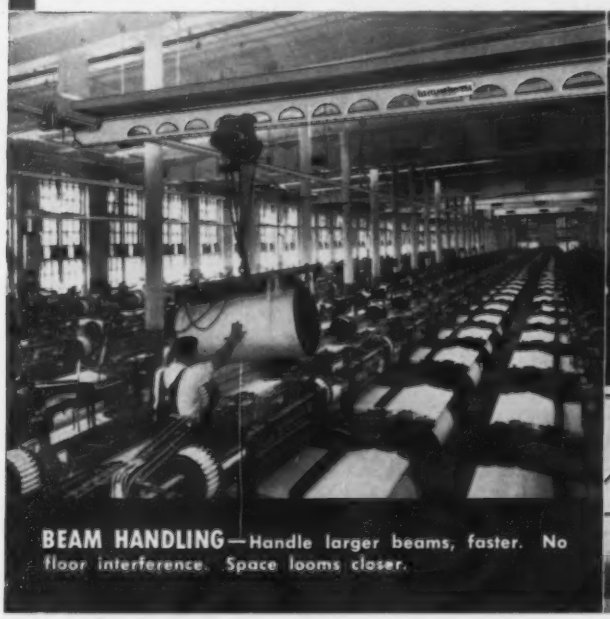


BALE HANDLING—Pile them higher, easier. Store more. Save aisle space.

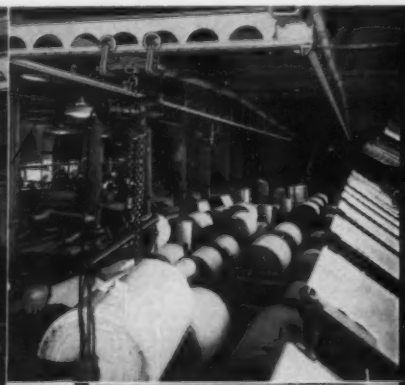


PACKAGE DYEING—Heavier loads with more packages quickly handled by one man.

Are you enjoying the many benefits that Cleveland Tramrail material handling equipment can provide? Hundreds of textile mills, large and small, are. We know of no other equipment that pays for itself so quickly. Why not get the facts? A Cleveland Tramrail representative will be glad to discuss textile handling with you, without obligation, of course.



BEAM HANDLING—Handle larger beams, faster. No floor interference. Space looms closer.



CLOTH HANDLING

Use floor area for production, not aisleways. Cut cloth handling time.

AUTOMATIC DISPATCH

Deliver materials between floors or buildings automatically. Cut costs.

GET THIS BOOK!

BOOKLET No. 2008. Packed with valuable information. Profusely illustrated. Write for free copy

CLEVELAND TRAMRAIL DIVISION
THE CLEVELAND CRANE & ENGINEERING CO.
2874 East 287 Street, Wickliffe, Ohio

CLEVELAND TRAMRAIL
OVERHEAD MATERIALS HANDLING EQUIPMENT

also because these new fabric structures make possible the creation of entirely new finished products in design and utility."

"Grow Cotton to Sell." Members of the Arizona Cotton Growers Association were told recently by Robert W. Smith, president of Lowenstein Cotton & Storage Corp., that the chief problem confronting them is development of a variety of cotton designed specifically for good performance in

textile mills in addition to good yields. "Cotton should be grown for one purpose and that is to be spun, woven, finished, converted and sold to consumers," he said. "Cotton's value as an agricultural commodity, therefore, of necessity is tied exclusively to its manufacturing qualities."

Hosiery Exports Continue Decline. Hosiery exports in 1959 continued the decline of the last few years. At 1,799,763 dozen pairs, last year's sales abroad were 34.7% below the 1958 total. Cotton types showed a 16.8% decrease for the year, nylon stockings dropped 40.7%, and men's and boys' socks of man-made fibers were off 31.2%.

Textile Machinery Standards. The Textile Machinery and Accessories Committee of the International Organization for Standardization has adopted nine standards for textile machinery, covering such items as sliver-can dimensions, spindle gauges for spinning and twisting frames, drafting roll diameters, width of looms, etc. The U.S.A. is not a participating member of ISO, but as an observer member, American Standards Association voted "no objection" on behalf of American industry.

More Wool Research. A worldwide research and product development organization for the wool industry, tentatively known

as the International Wool Development Co., is being formed and will begin operations about July 1. The new nonprofit company is being established by the Wool Boards which represent wool growers in Australia, New Zealand, and South Africa. In the U. S., a division of the organization, operating as a separate and independent entity, will take over the functions of the Department of Science and Technology of The Wool Bureau.

Weathering of Cotton. "Resistance to Weathering," fourth in a series of cotton quality studies prepared by the National Cotton Council and designed to stimulate research in specific areas where improvements would aid cotton in competing with the man-made fibers, is now available. It contains data showing the importance of

markets where weather resistance is important, reviews technical knowledge in the field, and points out promising approaches for fur-

Merchandising Notes

American Sheep Producers Council has adopted a new high total budget for promotion of wool and lamb of about $3,200,000 for the coming year. American Wool Council, a division of ASPC, will

place its first year's promotion in a back-to-school program, programs for men's wear and women's wear, and a home sewing program climaxed by a "Make It Yourself With Wool" contest.

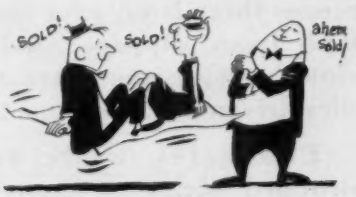
Callaway Mills are offering a line of printed towels this year for the first time.

Dan River Mills, through its sales subsidiary, Iselin-Jefferson Co., is marketing a synthetic suede

fabric for men's casual shoes. The fabric is claimed to be scuff-proof and completely washable.

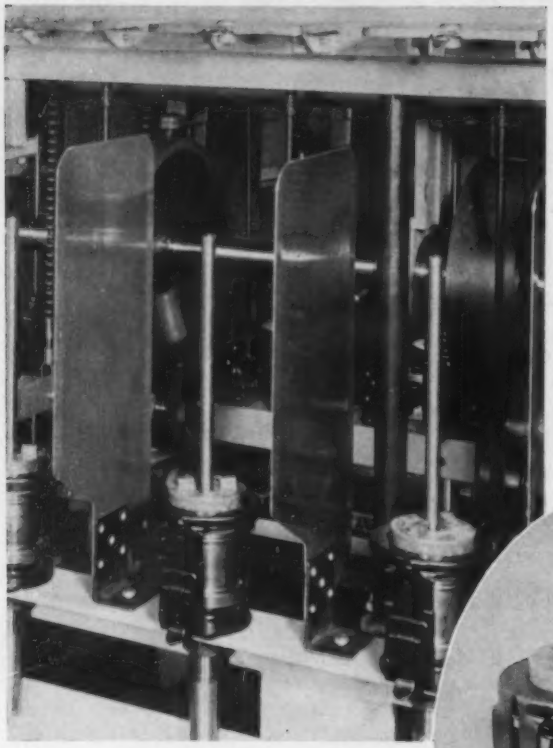
Du Pont Co. has launched a four-pronged promotion for its carpet nylon and Orlon. Nylon will be extensively promoted on the June Allyson TV show, 501 carpet nylon will also have its first national advertising on the same show, "Nylon Month" is now under way to tie in with local retailers promotions, and Orlon has now made its bow in carpets and will be strongly promoted.

James Lees and Sons Co. has published "A Carpet Man's Notes," pocket-size booklet showing how



a real "pro" makes a carpet sale, and describing each carpet in Lees' line, with its selling points.

Dow Corning Corp. is distributing a "Retail Executives' Guide to Fibers, Fabrics and Finishes," a series of monthly bulletins spotlighting information on textiles. The purpose is to help dispel the existing confusion on these subjects in the minds of retail executives, for more profitable promotion of current merchandise.

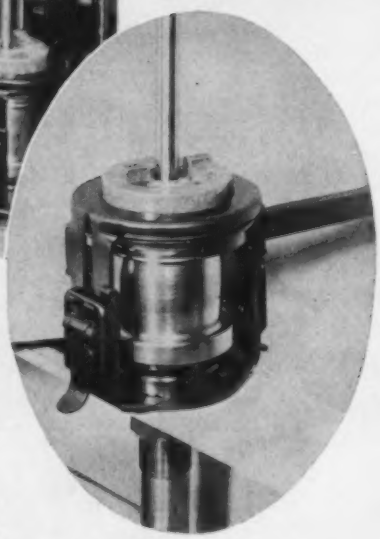


Again demonstrating

MEADOWS
YEARS-AHEAD
ENGINEERING

WE HAVE LICKED ANOTHER MAJOR TWISTER PROBLEM

WE ANNOUNCE: A new, completely automatic stop motion . . . . not electric, not pneumatic — no valves, no switches.



ONE DROP
ONE STOP
ONE SPINDLE

One single end down from the creel stops only its own spindle.

This single end, single spindle, completely automatic stop motion stops bobbin, spindle blade and yarn feed instantly, when single yarn in the creel breaks or runs out.

It leaves the whorl on the stopped spindle operating freely on ball bearings, which means there is no wear on the tape from slippage, and no slow-down on the other spindles driven with the same tape.

Eliminates waste from dropped ply.

Available on

MEADOWS

anti-friction

TWISTERS

with rings up to 9" in diameter and bobbin build up to 12". Meadows Twisters will handle any fibers or filaments that can be twisted on ring frames.

Watch for more Meadows developments at the Greenville show.

Further information or detailed folder on request.

MEADOWS MANUFACTURING CO.

Established 1931

ATLANTA 10, GEORGIA

Visit us at 1190 Astor Ave., S.W. • Phone us at Plaza 5-1663 • Write us at P. O. Box 10876

These carpets are 100% Creslan acrylic fiber, part of a sample collection designed by Edward Fields. Several mills have been working with Creslan in carpets on an experimental basis.

ther study. Copies are available from the Council, at 1200-18th St., N. W., Washington 6, D.C.

Laminated Knit Fabrics Expand. The relatively new development of laminating polyurethane foam to knit goods has opened up new markets for these fabrics, according to an official of Reeves Bros., Inc., one of four companies presently in the field. Last year was the first full season for the new product, and over a million yards were processed. The figure this year is expected to be over three million yards. The fabrics are reported to give excellent insulation with minimum weight increase.

Fewer Engineers. Enrollment at the 154 schools accredited by the American Society for Engineering Education continued to drop during the current school year. This past fall 240,063 students registered in engineering; last year there were 249,950, and in the fall of 1957 the total was 257,777. Under the influence of high enrollments in the mid-1950's, the number of engineering graduates continues to rise, but the recent drop in enrollments indicates that there will be fewer engineering graduates within the next year or two.

New from Provident . . .

GROUP LONG TERM DISABILITY INSURANCE

Provident's new Long Term Disability Insurance is a realistic answer to management's problem of how to pay disabled employees for long periods. Designed primarily for executives and key personnel, it also may be extended to include any class of employees.

Benefits are paid for 10 years or to age 65. And Long Term Disability Insurance eliminates the unknown liability of self-insurance. It is an excellent morale and goodwill builder that helps attract and hold quality personnel.

Ask your broker for complete details
or write for Provident's brochure,
"ROUGH ROAD AHEAD"

PROVIDENT
LIFE AND ACCIDENT INSURANCE COMPANY
CHATTANOOGA

The best machinery money will buy cannot improve the character of the cotton purchased.

Correct selection of the raw material is the initial step in control of final product.

Our classers working with a Modern Laboratory assures you the kind of cotton you need.

Fiber "know how" is not acquired overnight. Our knowledge is at your disposal.

OTTO GOEDECKE, INC.

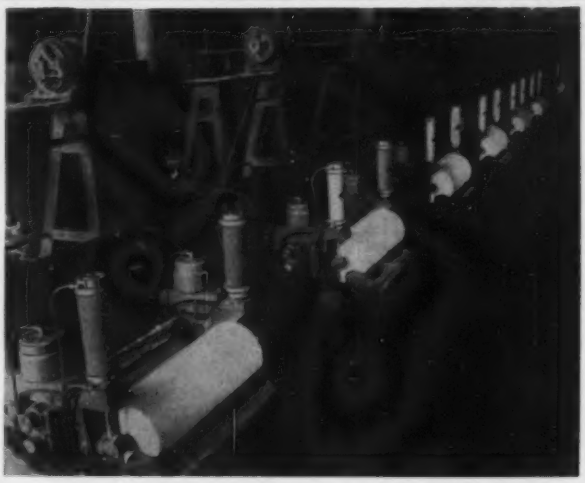
HALLETTSVILLE **COTTON** TEXAS

AS FAR AS THE EYE CAN SEE...

More Production, Greater Profits with the LONG* Pneumatic Lap Control System

Over 400 installations emphasize that mills prefer the LONG System. They have proven that the LONG System produces longer and heavier laps, increases picker production through longer running time between doffs, delivers quality laps from both cotton and synthetic fibers with maximum safety. Only the LONG System is devised to deliver uniform pressure on laps building up on calendar stack rolls, from start-up to doffing. Equip your existing pickers with the LONG System. Send today for complete details and illustrated brochure.

*Patent No. 2,871,519
Other U. S. and Foreign Patents Pending



Installation of complete LONG Lap Control System on 17 pickers in one of the largest picker rooms in the South. Pickers shown in the foreground are 1913 model Kitsons.

LIVINGSTON & HAVEN, Inc.

P. O. BOX 808-T • • • CHARLESTON, S. C.

Representatives in all major world textile areas. Address foreign inquiries to Platt Bros. (Sales) Ltd., Oldham, England

RECENT TECHNICAL AND COMMERCIAL DEVELOPMENTS

by J. B. Goldberg
Consultant to the Textile and Allied Industries

Exclusive

FIBERS AND YARNS

New Names. Du Pont has adopted the name of Orlon "Sayelle" for Type 21 reversible crimp acrylic staple. * * * Fiber Industries, Inc., has announced that the polyester fiber to be produced by them later this year will be called "Fortrel." (The fiber had tentatively been called "Teron.")

Improved Sewing Thread. Cluett, Peabody & Co., Inc., recently received a patent on a method of making a sewing thread to eliminate seam pucker. Process consists of increasing the stretchability of a cellulose thread by mercerizing, rinsing while free of tension, drying, and coating with water-soluble and nonelastic adhesive which will dry to a tack-free condition.

Spun-Dyed Triacetate. British Celanese Ltd. is said to be offering "Tricel" triacetate yarns in a few spun-dyed colors.

Polypropylene Fiber. Beaunit Mills has disclosed plans to install new equipment at Elizabethton, Tenn., for the production of 12 million lb of polypropylene fiber annually. In Japan, the Mitsubishi Petrochemical Co. and Mitsui Chemical Co. are reported to have signed separate contracts with Montecatini of Italy to manufacture polypropylene textiles and chemical products. * * * Industrial Rayon Corp. has announced the start of limited commercial production of polypropylene fiber and tow. Marketed under the trade name, "Prolene," the fibers are being offered in two, three, and six deniers at 90 cents a pound, according to the announcement.

Nylon for Texturing. A new Du Pont nylon yarn, Type 288, designed specifically for commercial texturizing equipment, is being evaluated in the trade. Superior processing properties and improved bulk, dyeing uniformity, and strength retention are claimed.

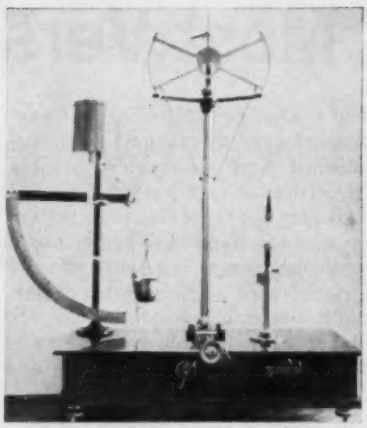
Immunized Nylon. Exhibited at the recent British Nylon Fair in England was a 100% nylon fabric with cross-dyed effect achieved through use of undyed immunized nylon in combination with regular dyed nylon.

More Nylon 6. American Enka Corp. is to increase heavy denier yarn output to 6½ million lb annually, primarily for use in tire cord; while Allied Chemical Corp. is expanding operations of their nylon plant by introducing a range of apparel-denier yarns.

False-Twist Yarns. "Kirklon Super-Bulk" was a new, post-relaxed false-twist bulked nylon yarn introduced by an English firm at the British Nylon Fair. The yarn was claimed to feature exceptional bulk, level dyeing, and suitability for weaving or knitting. Process patent applied for was thought to consist of a combined false-twisting, over-feeding to a second heat-setting unit to produce bulk with much of the stretch taken out.

MACHINERY AND PROCESSES

Textured Yarns. New textured nylon filament yarns recently exhibited in England included "Heatherdine," said to be produced by a combination of false-twisting and air jet texturizing, and "Elsalon" stabilized bulked yarn used in machine-pleated fabrics. Details were also released of the properties of Cheslene & Crepes, Ltd. "Crimplene" post-treated false-twist Terylene polyester yarns, featuring low relaxation shrinkage in boiling water. * * * A new, undisclosed process for yarn texturizing was reported to operate by overfeeding through an elongated tank heater before passage through a false-twist spindle. The bottom half of the spindle rotates in one direction and the top half in the opposite direction, virtually imparting "S" and "Z" twist simultaneously. * * * A newer model of the original French FT false-twist unit eliminates the machine creel and take-up arrangement and includes two heater zones and three sets of overfeeds. Both regular stretch and torqueless bulk varieties of yarn may be produced.



This is the Deforden tester (about 1920) for measuring the tensile strength, breaking extension, and torsional resistance of single fibers. It was exhibited by Fabric Research Laboratories at the recent Textile Research Institute annual meeting for its historical interest and to dramatize by contrast the precise instrumentation now available for measuring fiber, yarn, and fabric properties. A staff report of the meeting begins on page 195.

Processing Filament Yarn Sewing Threads. Marionette Mills, Inc., claims development of a machine and process to make stabilized sewing threads of Dacron or nylon.

Continued on page 135

Better dyeing

by INTERNATIONAL SALT COMPANY

Most Versatile Dye-Bath Reagent Is Extra Pure, Too

That's Sterling TNA-5, the finest reagent ever developed by International Salt Company. Sterling TNA-5 does an excellent job in neutral or alkaline dye baths for dyeing cotton, rayon or any blend of these fibers with wool. The reagent is equally effective in staple, yarn or piece-goods dyeing. And it is especially helpful with direct, sulphur or naphthol dyes, where it produces excellent crock fastness and clear, brilliant colors.

In addition to its great versatility, Sterling TNA-5 is more than 99.9% pure. This remarkable purity offers users of TNA-5 the following important benefits.

1. Brighter colors, smoother finish. Fabrics dyed with TNA-5 come out smoother, softer, more evenly dyed. That's because TNA-5 is free of any calcium or magnesium impurities that can cause "salt streaks" or uneven colors.

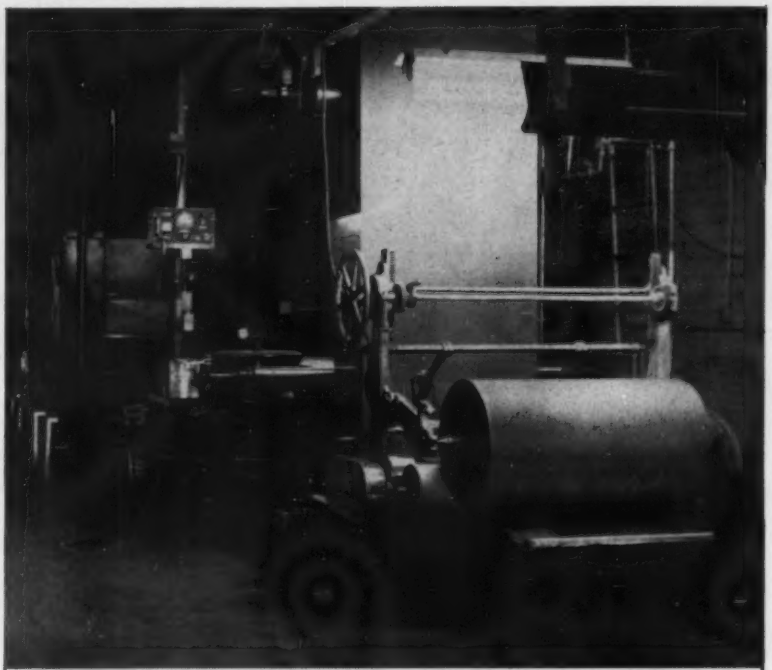
2. Readily soluble. Whether you add Sterling TNA-5 to a hot or a cold dye bath, it dissolves instantly and completely —and permeates the entire bath in seconds.

3. Effective used dry or in brine form. TNA-5 works equally well, whether it's used dry or as brine. However, many dyehouses lately have switched to brine (which is made automatically in the Sterling TNA-5 Dissolver), because they prefer the economies of bulk purchasing and reduced handling of TNA-5.

4. Recommended by dyestuff manufacturers. Because TNA-5 permits most dyes to show up better on finished fabrics, it has won the approval of the majority of dyestuff manufacturers. In fact, these people were instrumental in getting TNA-5 tested and accepted in many of the country's textile plants.

5. Saving on dyestuffs. When used to replace ordinary salt, Sterling TNA-5 can cut as much as $375 from a monthly dye expenditure of $5,000 by making dyes "work harder." TNA-5 forces *more* dyestuff out of solution and into the fibers being dyed.

6. Economical replacement for Glauber's Salt (anhydrous sodium sulphate). TNA-5 can effect good savings over the cost of Glauber's Salt. Yet it replaces Glauber's Salt on a pound-for-pound basis, and has an equally good exhaustion rate.



99.9% pure Sterling TNA-5 is used to dye highest-quality FORT REP/UTATION wash-and-wear fabrics. Picture shows a roll of FORT REP/UTATION being processed at the Old Fort Finishing Plant, a division of United Merchants & Manufacturers, Inc.

INTERNATIONAL SERVES ALL OF TODAY'S TEXTILE NEEDS

Through skilled and experienced salt specialists, International Salt Company can help dyehouses and textile mills get greater efficiency and economy in their dyeing processes. In addition to Sterling TNA-5 Reagent, International also produces high-quality Sterling Evaporated and Sterling Rock Salt in all types and sizes. And we also make automatic dissolvers in metal or plastic for these products. So we can recommend the type of salt most perfectly suited to your plant's needs.

If you'd like the assistance of an International technician on any problem concerning salt or brine—or further information on Sterling TNA-5—call our nearest sales office. Or write to us direct.

DISTRICT OFFICES: Boston, Buffalo, Charlotte, Chicago, Cincinnati, Detroit, Newark, New Orleans, New York, Phila., Pitts., St. Louis. ADMINISTRATIVE OFFICE: Clarks Summit, Pa.

INTERNATIONAL STERLING TNA-5 **SALT COMPANY**

"A STEP AHEAD IN SALT TECHNOLOGY"

Continued from page 133

Pneumatic Spinning Device. A German inventor has patented a pneumatic spinning device comprising an elongated tube, nozzle, and fiber-feeding arrangement whereby loose fibers are fed through the tube and the yarn is formed by air suction and twisted by an eddy current.

FABRICS AND FINISHES

Electrically Heated Carpet. An English firm has introduced an electrically heated Wilton carpet into which fully-protected heating elements are woven and concealed beneath the pile. Heat is diffused over a wide area with the carpet never becoming more than pleasantly warm to the touch.

New Reactive Dyes. Sandoz, Inc., is now producing "Drimarine-Z" reactive dyes developed especially for printing cotton and rayon fabrics. It is claimed that these colors show little take-up of loose dyestuff in washing baths. The Geigy Co. Dyestuffs Div. is offering "Geigy Reactone" colors in a range of shades featuring easy removal of unfixed colors at moderate temperatures and no staining of white grounds.

New Cotton Resin Finishing Technique. Developed at the Southern Regional Research Laboratory is a new technique for the application of methylolmelamine resins to cotton utilizing formic acid to produce a colloid. The fixed resin is deposited in the outer portion of the cell wall, resulting in different properties being imparted to the fabric. Method is suitable for continuous pressing on conventional equipment and cost is estimated to be under 7¢ per yard on 80 x 80 fabric.

Combining Dye and Resin. Arnold, Hoffman & Co. has developed a process for applying Procion reactive dyes along with resin finish in a single operation.

TEST METHODS

Fabric Moisture Gauge. The Swiss firm of Sina, Ltd., has introduced the "equi-Hygro-Scope" moisture gauge for measuring relative humidity of the air and equilibrium moisture of materials rather than absolute moisture content. The instrument is portable and can be used in any continuous process.

Carpet Testers. Shown at the London International Carpet Fair was an appearance retention tester in which a tetrapod "walker" tumbles over the face of the carpet, which forms the lining of a rotating drum. Courtaulds Ltd. exhibited a BCA pile abrasion tester used to evaluate different carpet qualities and pile yarn compositions.

Laboratory Dyeing Unit. A Belgian concern is manufacturing a laboratory dyeing unit which permits dyeing of samples with a liquor ratio of 1:25 and can be heated by gas, steam, or electricity. The unit has six becks of from 250 cc to 500 cc capacity each.

Robert E. Pomeranz
President, Roberts Company
Sanford, North Carolina
Mfrs. of Textile Machinery

"Sales of Roberts ARROW Spinning Frames for 1960 should be 50% over 1959, which jumped 60% over 1958. Growth needs increasing funds so that customers can be adequately served. In Textile Banking Company, we have found a policy that is simple and realistic. Its management has an unlimited desire to accommodate itself to our needs and those of our customers."

* * *

TBC credit and financial services are available in many fields of industry. They are most effective for manufacturers with annual sales of $500,000 and over. A TBC officer will give prompt attention to any inquiry.

TEXTILE BANKING COMPANY
55 Madison Ave., Dept. 12G, New York 10, N. Y.

SUBSIDIARIES:
T. B. C. Associates, Inc., New York
Southwest Texbanc, Inc., St. Louis
Pacific Texbanc, Inc., Los Angeles

TBC

For further information use Handy Return Card, Page 281

Dixie Bearings now offers a new and improved RETAINING RING ECON KIT

400 Truarc Cadmium Plated Rings
–84 Sizes–70% of Ring Sizes Used in Industry

Save — eliminate many purchase orders for small quantities of retaining rings — Get most sizes used on your equipment with only ONE order — in one shockproof, plastic case. Sizes from ¼ to 2½ inches in the three most used Truarc series of internal, external and universal crescent ring designs. All rings meet National Aircraft Standards NAS 669 and NAS 670. Low priced at $34.50 per kit. Use the coupon below TODAY!

Installation and removal tools also available.

Dixie Bearings, Inc., 276 Memorial Drive, S.W., Atlanta, Georgia
Gentlemen:
Please ship immediately_____Retaining Ring Kits at $34.50 each.

Company_____

Address_____

Signed_____ Title_____

Providing bearing service in the South

DIXIE BEARINGS, INC.

MAIN OFFICE: 276 Memorial Drive, SW, Atlanta, Georgia

BRANCH OFFICES: Jacksonville, Fla • Louisville, Ky. • Baton Rouge, La. • New Orleans, La. • Charlotte, N. Carolina • Greensboro, N. Carolina • Greenville, S. Carolina • Chattanooga, Tenn. • Kingsport, Tenn. • Knoxville, Tenn. • Nashville, Tenn. • Norfolk, Va. • Richmond, Va.

EXECUTIVE VIEWS

Atlantic City or Sea Island?

COME THE last week of this month, about 20,000 mill men—from board chairmen to superintendents and purchasing agents—will be heading by plane, train, and car for Atlantic City, N.J. At about the same time, several hundred other mill men will be headed for Sea Island, Ga., and Miami, Fla. Another group of a couple of hundred will have just returned from Miami, to face desks on which about a week's work has accumulated.

The travelers headed for Atlantic City will be going to study the largest exhibition of textile machinery and equipment ever held in this country—or probably, for that matter, in any country. We refer, of course, to the American Textile Machinery Exhibition-International, which as every textile man from Alabama to Zamboanga knows by now, will open a five-day stand at Atlantic City's Auditorium on May 23.

Those enroute to or from Sea Island and similar watering places will be eagerly anticipating or fondly remembering a few days of sun, sand, and relaxation.

Now, we have never gone in for teaching grandma how to suck eggs, and we wouldn't presume to tell a mill man how to run his plant. But putting ourselves in the place of the stockholders in the mills whose top officials have chosen sun and sand over a crowded exhibition hall, we feel a little uneasy about whether or not these officials are making the choice which is in the best interests of the future competitive position of their mills.

Let us hasten to add that we are fully appreciative of the fine work done by the textile associations in advancing both the interests of their own particular segments of the industry and those of the textile industry as a whole. We are also fully appreciative that textile conventions are not *all* sun, sand, and platitudes. But we do feel that *a mill official whose decisions will make or break his company is keeping himself somewhat less than fully informed by choosing a few days of fun in Florida rather than a few days of work in Atlantic City the last week of this month.*

CHECKING INTO the reasoning behind the decisions to hold textile association meetings in conflict with the ATME-I, we ran into some rather surprising logic:

"The Atlantic City Show is for superintendents and overseers; our convention is for top management, so there is no conflict," was the reasoning of one association official (who is also a mill president). Well, if superintendents and overseers are going to make the decisions which will determine whether a mill is still in business a few years from now, then there is no conflict—and, it would seem, no need for top management either.

But of course this official meant that in his opinion top management will not be going to Atlantic City—that the 300 or so exhibitors will have spent countless high-priced man-hours and millions of dollars to display their wares to mill operating men who after all do not have the final say-so in purchasing capital equipment. He has been badly misinformed. Top management *will* be there. At the last Atlantic City Show, in 1954, 1,836 registrants had the title board chairman, president, vice-president, owner, partner, secretary, or treasurer. In addition, there were several hundred mill managers. And this year there is every reason to expect the registration among this group to be even higher.

"Several of us went to Milan last fall, and Atlantic City will be just more of the same, on a smaller scale," said a mill man who holds office in another association. He, too, has been badly misinformed. True, the E.I.A.T. Show in Milan had about 400,000 sq ft of exhibits, compared with about 300,000 sq ft scheduled for Atlantic City. But about a third of the space at Milan was devoted to the knitting and garment-cutting industries. At ATME-I, the knitting industry will have only token representation, and the garment-cutting industry

The Banker is a Good Man to know

The Trust Company of Georgia — which has almost 70 years of experience — believes that a banker and his client should have a close relationship. Because of this belief, at the Trust Company of Georgia you will find that the Senior Officers are available to their customers. Find out for yourself how this open-door policy in banking can work to your advantage. The Trust Company main office is located at Edgewood and Pryor and there are six other banking locations in Atlanta. Experienced officers to serve you are available at all these locations.

Member FDIC

TRUST COMPANY OF GEORGIA

Banking Since 1891

ATLANTA

MAIN OFFICE — Edgewood at Pryor
MOTOR BANK — Behind the main bank
BUCKHEAD OFFICE
EAST ATLANTA OFFICE
LENOX SQUARE OFFICE
WEST END OFFICE
WEST PEACHTREE OFFICE

will not be represented at all.

Further, by no means all of the equipment at Milan was actually running; a number of experimental models and prototypes were on display. Everything at Atlantic City will be operating and commercially available.

Only 22 American textile machinery firms were represented at Milan, and they occupied only 13,500 sq ft of floor space. All the major American manufacturers will be at Atlantic City, plus most of the important foreign firms who exhibited in the E.I.A.T. Show.

"We've had this convention planned for a long time, and it was too late to change," was another comment. But the American Textile Machinery Association has been planning ATME-I for a long time, too; previews and news about it have been appearing in the textile press for more than two years. So there was no need for conflicts in the first place, but the dates could have been changed—as the Carded Yarn Association did when it postponed its 1960 convention for two weeks so as not to prevent its members from attending the Southern Textile Exposition next October.

BUT WE DON'T feel that the obvious step was the negative one of simply changing convention dates. We believe that the obvious step was the positive one of actively encouraging attendance at ATME-I by scheduling textile conventions for the last week in May —in Atlantic City.

The ATMA did its best to encourage the various associations to hold their annual meetings in Atlantic City concurrently with the Show, but with little success. As of this writing, the Narrow Fabrics Institute is the only association scheduled to hold its annual meeting then (ACMI's Tax Committee will also meet during the Show).

We admit that there is no Fontainebleau or Cloister in Atlantic City, but putting ourselves again in the place of the mills' stockholders, we don't feel that a few days at Chalfonte-Haddon Hall or the Marlborough-Blenheim is too high a price to pay for a look at the future.

G.H.D.

FUTURE EVENTS

Date	Event	Location
May 4-5	ACMI Fiber Testing Laboratory open house	The Clemson House Clemson, S. C.
5	National Knitted Outerwear Association annual banquet	Waldorf-Astoria New York City
5-6	AIEE conference on electrical applications in textiles	Heart of Atlanta Motel Atlanta, Ga.
6	Western New England Section AATCC (ladies' night)	Rapp's Paradise Inn Ansonia, Conn.
6-7	National Association of Woolen & Worsted Overseers	Hotel Madison Boston, Mass.
7	Alabama Textile Operating Executives' slashing and weaving discussion, 9:30 A.M.	Thach Auditorium Auburn, Ala.
11-14	Carolina Yarn Association	The Carolina Pinehurst, N. C.
13	Northern New England Section AATCC	L.T.I. Lowell, Mass.
13	Pacific Southwest Section AATCC	Rodger Young Auditorium Los Angeles, Calif.
13-14	South Central Section AATCC outing	Riverside Hotel Gatlinburg, Tenn.
17-18	Conference on fiber blends	QM R. & E. Command Natick, Mass.
19-21	Georgia Textile Manufacturers Association annual meeting	The Diplomat Hollywood, Fla.
20	Delaware Valley Section AATCC outing	North Hills Country Club North Hills, Pa.
20	Metropolitan Section AATCC (ladies' night)	Kohler's Swiss Chalet Rochelle Park, N. J.
23-27	American Textile Machinery Exhibition—International	The Auditorium Atlantic City, N. J.
25-27	Narrow Fabrics Institute annual meeting	Atlantic City Country Club Northfield, N. J.
25-28	Tufted Textile Manufacturers Association annual convention	The Fontainebleau Miami Beach, Fla.
26-28	South Carolina Textile Manufacturers Association annual meet	The Cloister Sea Island, Ga.
May 30-June 3	Textile Institute annual conference—fiber science	London, England
May 31-June 2	Cotton Research Clinic	Grove Park Inn Asheville, N. C.
June 3-4	Piedmont Section AATCC outing	Ocean Forest Hotel Myrtle Beach, S. C.
10-12	Southeastern Section AATCC outing	Radium Springs Lodge Radium Springs, Ga.
18	Mid-West Section AATCC outing	Brown's Lake Burlington, Wis.
23-25	Southern Textile Association annual meeting	Grove Park Inn Asheville, N. C.
24	Rhode Island Section AATCC outing	Metacomet Country Club E. Providence, R. I.
Sept. 8-9	Combed Yarn Spinners Association	The Cloister Sea Island, Ga.
8-9	Textile Quality Control Association	Clemson House Clemson, S. C.
14-17	Southeastern Maintenance & Engineering Show	State Fair Arena Raleigh, N. C.
15-16	Textile Processing Symposium, American Gas Association	Sedgefield Inn Greensboro, N. C.
15-16	Chattanooga Yarn Association outing	The Read House Chattanooga, Tenn.
28-30	North Carolina Textile Manufacturers Association meeting	The Carolina Pinehurst, N. C.
28-29	Chemical Finishing Conference	Statler Hotel Washington, D. C.
Oct. 3-7	Southern Textile Exposition	Textile Hall Greenville, S. C.
6-8	AATCC national convention	Sheraton Hotel Philadelphia, Pa.
19-22	Carded Yarn Association annual meeting	Grove Park Inn Asheville, N. C.
22	Textile Operating Executives of Georgia slashing and weaving discussion	Georgia Tech Atlanta, Ga.
Nov. 12	Textile Education Foundation, Inc.	Georgia Tech Atlanta, Ga.

Fabricated and installed at Lanett Bleachery and Dye Works, Lanett, Alabama by Sims Metal Works.

PROVEN SUPERIOR

In actual day to day operation where the real worth of machinery is tested, Sims new Stainless Steel 75 psi reversed dished head 44 Dry Cans* are proven superior. They require less horsepower . . . are easier on bearings . . . and save floor space with no loss in drying surface. And the chain drive is on one side of the can, while the steam fittings are on the other side . . . permitting maintenance of the drive without time lost waiting for steam pipes to cool.

Furnished Teflon-coated if desired.

FOR ECONOMY AND QUALITY. Our modern and progressive metal-working shops, our skilled craftsmen, our know how—these are guarantees of quality. For custom tailoring of stainless steel, call, wire, or write *now*.

*U.S. PAT. OFF. NO. 2779104

Sims
METAL WORKS
WEST POINT, GEORGIA

Harley D. Hohm, Inc., 128 Bulat Ave., Greenville, S. C.

Friday Textile Machine & Supply Co., Gastonia, N. C.

FABRICATORS SINCE 1928

GPE Controls (Formerly Askania Regulator Company)

CLOTH GUIDES

save TIME...MONEY...MATERIAL!

GPE Controls Cloth Guide lets the operator tend more machines . . . cuts labor cost!

- Double tentering speeds!
- Use minimum selvage.
- Slit without side trim!
- Winds 100-ton rolls evenly to protect edges!
- ±.015" accuracy at speeds up to 5000 fpm!
- Air or photoelectric heads for sensing web edge, porosity, opacity, or reflectance.
- Non-clog air sensing head (patented) never touches web, works perfectly with linty, dusty, or abrasive webs.
- Hydraulic actuation for unlimited power and speed.
- Engineered by specialists in industrial automatic controls.

MAIL CARD for catalog

Just mail this postage-paid reply card. We'll rush you NEW Catalog EG84, with photos and diagrams representing thousands of installations, complete detailes on the world's broadest line of cloth guides.

FIRST CLASS

Permit No. 16993

Chicago, Illinois

AIR MAIL

BUSINESS REPLY MAIL

No postage stamp necessary if mailed in the United States

GPE Controls, Inc.

240 East Ontario Street

Chicago 11, Illinois

GPE Controls lets you choose from **43 different models**... get just the right **CLOTH GUIDE!**

GPE Controls lets you choose from air or photoelectric sensing of web edge, porosity, opacity, or reflectance. Run machines faster. Save manpower. Save material. Shown here are only a few of the 43 different models available. Choose from the world's broadest line of Web Guides to get the control that's just right for your job! Mail post card below for complete information.

Model 558MA-1—Light-duty unit with local and remote manual/automatic control and automatic locking, for ease of start-up.

Model 525—Twin unit, light duty, for operating both rails of tenter frames, also as two separate controls for laminators, etc.

Model 108PJ—Medium-duty, widely used for tubing and examining machines.

Model 25—Heavy-duty twin unit for tenter frame applications or medium-duty applications on laminators, etc.

Save TIME, MONEY, MATERIAL with units like these!

Photoelectric sensing head, solid-state, rugged and dependable, adaptable to any GPE Controls unit. Line-following unit also available.

Solenoid-operated locking valve, available on all models, cuts automatic control in and out automatically. Also furnished as high-speed fail-safe.

Model 300—Heavy-duty, for control loads up to or in excess of 100 tons. Used primarily in the basic metal industries.

Model 115's—Extra-high speed—now being furnished for the world's fastest tenter frames . . . more than 2000 feet per minute.

GPE Controls, Inc.
A Subsidiary of General Precision Equipment Corporation
240 East Ontario Street, Chicago 11, Illinois

GPE Controls | A GENERAL PRECISION COMPANY

Please RUSH me your new catalog on GPE Controls cloth guides!

Name _____

Title _____

Company _____

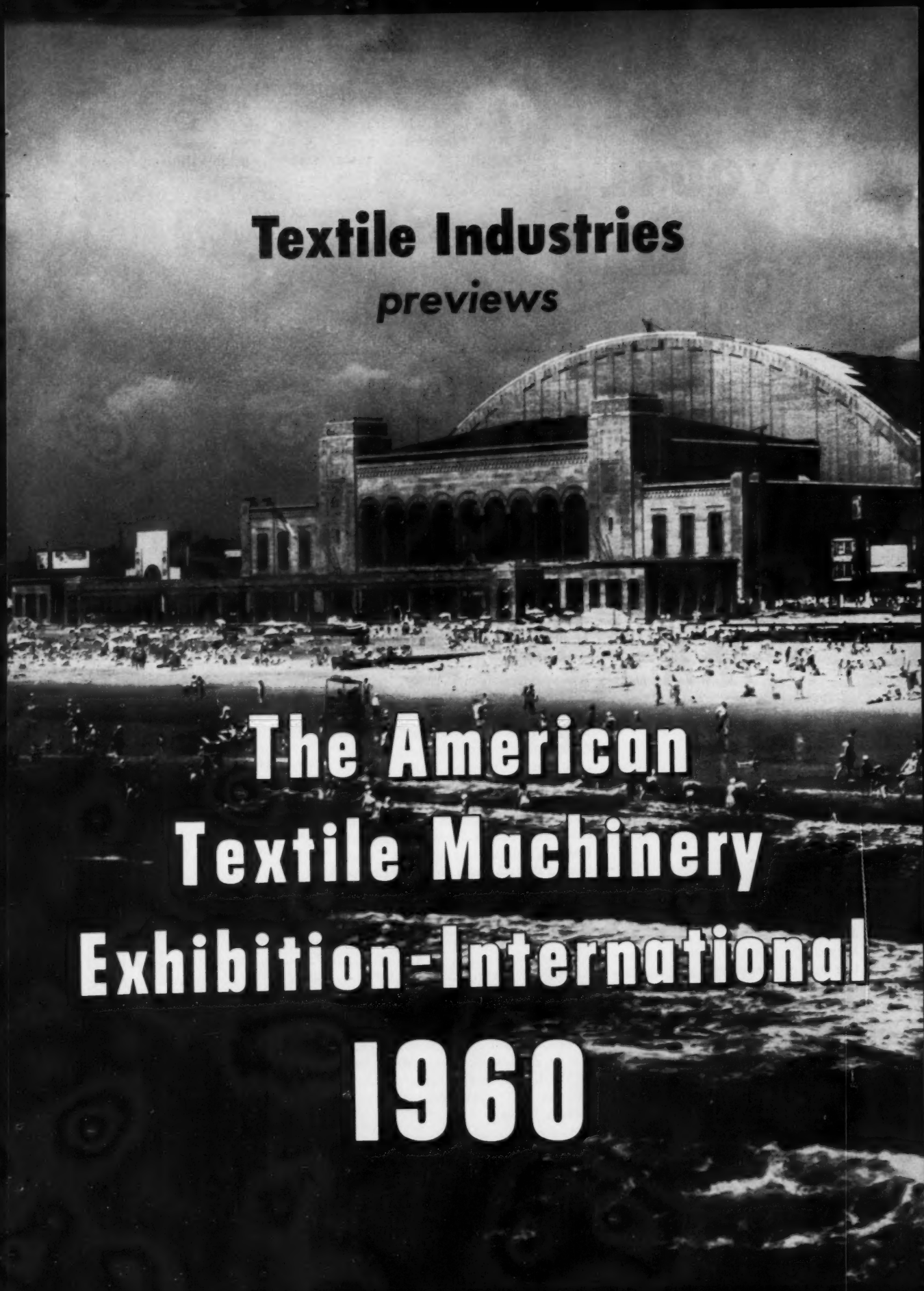
Street _____

City _____ Zone _____ State _____

I am interested in applying Cloth Guide control to a _____ (type of machine)

Just mail this postage-paid reply card. We'll rush you NEW Catalog E684, with photos and diagrams representing thousands of installations, complete details on the world's broadest line of cloth guides.

MAIL CARD for catalog


Textile Industries
previews
The American
Textile Machinery
Exhibition-International
1960

WHAT YOU'LL SEE IN ATLANTIC CITY at the

ATMA

Parade of Progress

THE AMERICAN Textile Machinery Exhibition—International, which is to be staged in the modernized Atlantic City, N. J., Convention Hall or Auditorium May 23-27, 1960, will provide textile mill management and operating executives a convenient means of examining the products of more than 330 domestic and foreign suppliers to the industry.

According to the American Textile Machinery Association, sponsor of the show, the capital textile equipment on display easily will represent an outlay of $30 million, the most ever assembled in a U. S. textile machinery show, or anywhere else under one roof.

To help readers who are going to Atlantic City plan for the most profitable utilization of their time, and to inform those who are not going of new equipment and materials to be introduced, TEXTILE INDUSTRIES presents this 36-page word-and-picture preview consisting of:

1. Alphabetical list of exhibitors when this issue went to press, including home office address and (if known) name and address of U. S. representative of foreign firms.

2. Description of all exhibits which had been received at presstime, names of representatives to be in booth, and their residence while in Atlantic City.

3. Photographs of 80 items which are to be shown in the U. S. for the first time. (A key number is provided in parentheses at the end of each caption for requesting more information on the Handy Return Card on page 281.)

4. Simplified floor plan of the exhibition area (pages 175-178).

In addition, many advertisements in this issue contain information about equipment and materials to be shown.

ADMISSION. Only those persons wearing the official ATMA Parade of Progress badges will be admitted to the exhibition area. Badges will be issued at the registration desk to the left of the lobby of Convention Hall.

Visitors may save time by obtaining before going to Atlantic City a combination registration card and badge insert, filling in the information requested, and taking it with them to the registration desk.

Registration cards may be obtained from any of the following: (1) representatives of suppliers who are exhibiting at the show; (2) The Editors, TEXTILE INDUSTRIES, 806 Peachtree St., N. E., Atlanta 8, Ga.; (3) Mrs. Mildred G. Andrews, Executive Secretary, ATMA, P. O. Box 596, Vienna, Va.; or (4) Albert C. Rau, Manager, ATME-I, Campbell-Fairbanks Associates, 332 Park Square Bldg., Boston, Mass.

SHOW HOURS. Doors to the exhibition will be opened to visitors daily at 10:00 A.M. and closed at 6:00 P.M.

SILENCE BREAKS. To facilitate business discussions, management of the show has scheduled four periods of silence daily—15 minute intervals when all machinery will be stopped. Silence breaks will begin at 11:30 A.M., 1:15 P.M., 3:00 P.M., and 4:45 P.M.

CAMERAS BANNED. Visitors are not allowed to have cameras in the exhibition areas. They are requested to check cameras, regardless of size or description, at the manager's office.

HOUSING. The Atlantic City Housing Bureau has arranged for 39 hotels and 39 motels, which are convenient to Convention Hall, to house those planning to attend the show.

The official ATME-I reservation form must be used for requesting hotel/motel accommodations. It may be obtained from Mrs. Andrews, Mr. Rau, or TEXTILE INDUSTRIES at the addresses given above under "Admission."

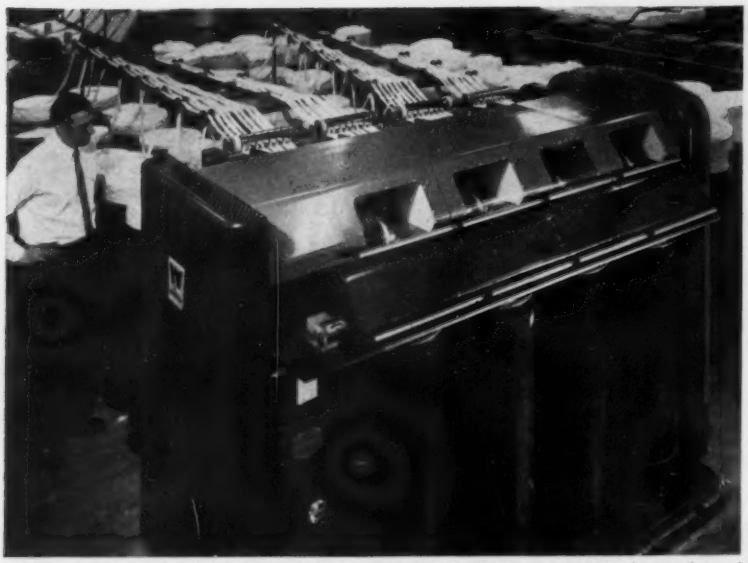
WHAT TO WEAR. Temperatures average generally about 62 F during the period May 23 - 27, with a high of around 69 F and a low of 57 F, according to the Atlantic City Convention Bureau.

Light-weight business suits are worn from May on, the report stated. However, the East wind blowing in from the sea can drop the temperature 15 to 20 degrees without warning, it was explained. So it is always safe to bring along a light-weight top coat.

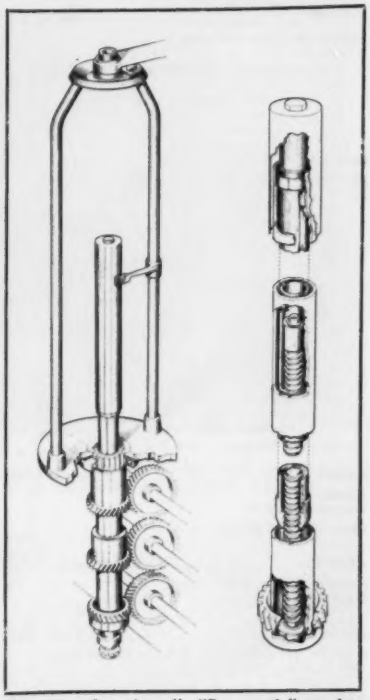
OTHER EVENTS. The following events have been scheduled to be held in Atlantic City during the week of the show:

Monday, May 23 —Meeting of ACMI Tax Committee and representatives of the Internal Revenue Service, luncheon, Hotel Dennis.

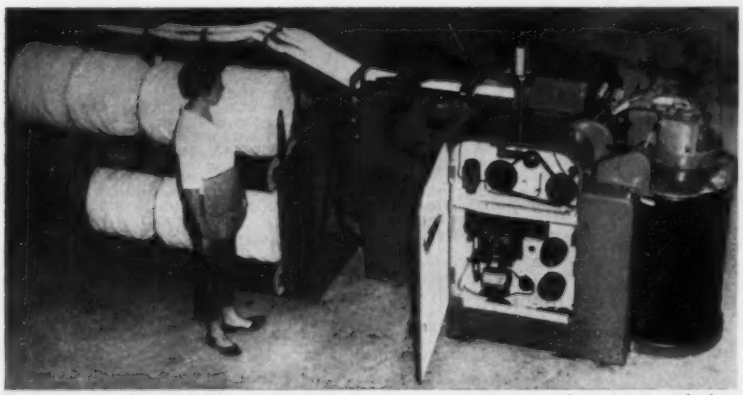
Wednesday, May 25—9:30 A.M.: Seminar on future of textiles, for mill management and sales executives (details on page 138, TI for April), Shelburne Hotel. 5:30 P.M.: Reunion of alumni of Lowell Technological Institute, Marlborough-Blenheim Hotel. Spring meeting of Narrow Fabrics Institute begins, Atlantic City Country Club, Northfield, N. J.



Delivery speeds up to 600 fpm on carded work and 450 fpm on combed stock are claimed for this latest Whitin four-delivery "Even-Draft" drawing frame which will be on display. Improved pneumatic waste removal (note enclosed trumpets) is another feature. (E-301)

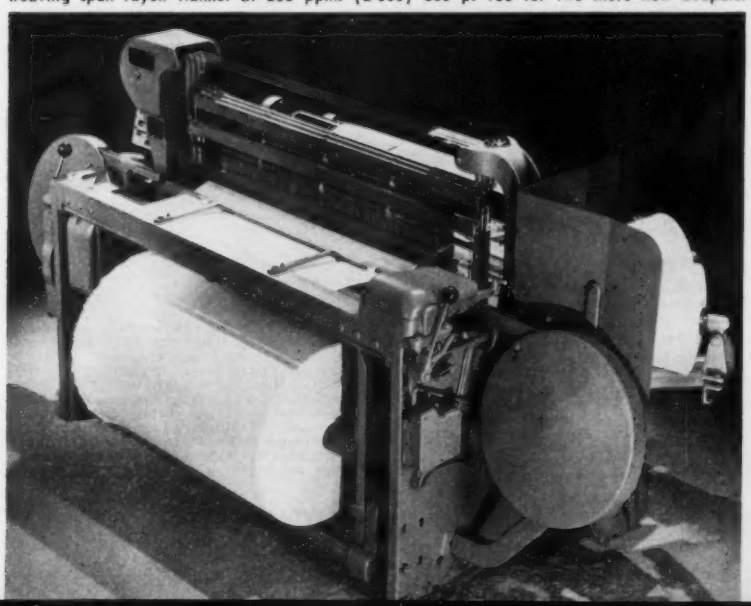


The new Saco-Lowell "Rovematic" roving frame, spindle and flyer arrangement of which is shown here, makes a 14" x 7" package at a speed of 1200 rpm. Note that both ends of flyer are tied together to eliminate problems caused by spread or deflection. Telescoping spindle allows doffing without removal of flyer. Machine will be operating in Booth 482. (E-304)



This electronically controlled worsted yarn system preparatory machine is one of three to be introduced by Roberts Co. Called the Roberts-Tematex "AutoEvener," the machine is said to automatically and instantaneously even to within plus or minus 1% the weight of fibers fed into it. (E-302)

Three Draper shuttleless looms will be operating at the show. This 50" model will be weaving spun rayon flannel at 238 ppm. (E-303) See p. 155 for two more new Drapers.



This new stroboscope, Type 1531-A "Strobotac," is much easier to use than previous models, according to General Radio Co. Panel can be tilted to any desired operating position, and lamp housing can be oriented in any direction over a hemispherical area. (E-305)

WHAT YOU'LL SEE IN ATLANTIC CITY

ABBOTT ..... **Booth 84**

Abbott Machine Co., Inc.
Wilton N. H.

PERSONNEL IN BOOTH:
S. L. Abbott, pres.
S. A. Roane, foreign sales mgr.
L. S. Ligon, Sr., sou. sales mgr.
E. W. Skinner, sales engr.

ABINGTON ..... **Booth 240**

Abington Textile Machinery Works
200 Wales St., North Abington, Mass.

EXHIBITING FIRST TIME: "Cardpen," a drafting attachment that replaces calender rolls on a cotton card and provides a 20 per cent increase in production without loss of quality.
ALSO SHOWING: Latest vacuum stripping system for revolving flat top cards; hand knotters; automatic remote controlled bottom discharge receiver.
PERSONNEL IN BOOTH:
J. W. Burbine, sales mgr.
W. W. Brame, selling agt.
M. R. Bradley, ser. dept.
S. Smith, Jr., treas.
F. J. Richardson, supt.
O. H. Ramo, ch. eng.

ABNEY ..... **Booth 1229**

Abney Mills
Greenwood, S. C.
(See *SOUTHEASTERN LOOM*)

AEROSOL ..... **Booth 1538**

Aerosol-Compagnie
Hanover D, Germany

ALEMITE ..... **Booth 760**

Alemite Div., Stewart-Warner Corp.
1826 Diversey Parkway, Chicago, Ill.

ALLEN-BRADLEY ..... **Booth 404**

Allen-Bradley Co.
136 W. Greenfield Ave., Milwaukee 4, Wis.

EXHIBITING FIRST TIME: Bulletin 700 convertible contact a-c control relay.
ALSO SHOWING: Manual and magnetic starters for full voltage and reduced voltage applications; pilot devices and accessories.

ALLEN WARPER ..... **Booth 274**

Allen Warper Co.
40-44 Church St., Lowell, Mass.

ALLENTOWN BOBBIN ..... **Booth 654**

The Allentown Bobbin Works, Inc.
417-431 N. 14th St., Allentown, Pa.

EXHIBITING: Bobbins and spools for the throwing of fine denier yarns such as silk, rayon, nylon, and combination yarns.
PERSONNEL IN BOOTH:
H. W. Mack, vice-pres.
H. S. Barnes, sec.-treas.
RESIDING AT: Empire Motel

ALLGAUER ..... **Booths 99, 482**

Allgauer Maschinenbau G.m.b.H.
Kempten-Allg., Germany
(See *SACO-LOWELL*)

ALLIED CHEMICAL ..... **Booth 36**

Allied Chemical Corp.
261 Madison Ave., New York 16, N. Y.

EXHIBITING FIRST TIME: Textured filament nylon in home furnishings fabrics; use of mirror-effect, color-blend, space-treated, cork-screw, and other innovations in heavy denier continuous filament nylon.
PERSONNEL IN BOOTH:
R. E. Ellsworth, mgr. prom. and fiber adv.
F. P. Gavigan
A. Kranzler

ALLIS-CHALMERS ..... **Booth 66**

Allis-Chalmers Mfg. Co.
P. O. Box 512, Milwaukee 1, Wis.

EXHIBITING: Variable speed drive; spinning frame motor; pump, motor, and control for plant air conditioning.
PERSONNEL IN BOOTH:
C. B. Rumble, Jr., dist. mgr.
A. W. Robinson, rep.
L. P. Gregory, supv. eng.

DYESTUFF REPORTER ..... **Booth 758**

"American Dyestuff Reporter"
44 E. 23rd St.
New York 10, N. Y.

AMERICAN LAVA ..... **Booth 418**

American Lava Corp.
Cherokee Blvd., Chattanooga 5, Tenn.

EXHIBITING: Alsimag ceramic thread guides.
PERSONNEL IN BOOTH:
J. B. Shacklett, sales mgr.
J. S. Gosnell, sales eng.
W. J. Geary, sales eng.
J. W. Crisp, sales eng.
W. H. Cooper, sales eng.
RESIDING AT: Empress Motel

AMERICAN MOISTENING ..... **Booth 51**

American Moistening Co.
Cleveland, N. C.

EXHIBITING FIRST TIME: A ceiling cleaner for cleaning ceiling and walls; a roving frame cleaner; a floor-mounted loom cleaner.
ALSO SHOWING: No. 6 atomizer; "Blow-Thru" valve; sling psychrometer; Amco Psychron (automatic battery-operated portable psychrometer); automatic ventilating unit for ductless evaporative cooling system; Model 35 self-contained humidifier; demonstration of small unit air washer; movies of Amco loom cleaning and ceiling cleaning units in operation in mills; and other standard accessories for humidification and air conditioning systems.
PERSONNEL IN BOOTH:
M. McCall, gen. mgr.
M. H. Irons, asst. gen. mgr.
H. R. Rich, sales eng.
N. B. Chase, sales eng.
W. A. Mullins, dept. mgr.
J. D. Johnson, sales eng.
J. H. Waldrip, sales eng.
J. E. Townsend, sales eng.
L. D. Terry, sales eng.
J. Walmsley, sales eng.
RESIDING AT: Shelburne Hotel

AMERICAN MONORAIL ..... **Booth 1437**

The American MonoRail Co.
1112 E. 200th St., Cleveland 17, Ohio.

EXHIBITING FIRST TIME: A loom cleaner featuring an entirely new principle of operation—it is mounted so the cleaner heads travel closely over the front and back of the loom, sending out intermittent currents of air directed at opposite angles to set up a fluttering action in the warp yarn and thereby prevent lint accumulation.
ALSO SHOWING: A roving frame cleaner and vacuum type spinning frame cleaner.
PERSONNEL IN BOOTH:
C. L. Fell, vice-pres. mkt.
L. R. McEachern, sales mgr.
John Browne, dist. mgr.
V. W. Cook, dist. mgr.
H. Joe Gleaton, dist. mgr.
Henry McKinney, rep.
C. P. Newell, rep.
RESIDING AT: Claridge

AMERICAN RIETER ..... **Booths 5, 19**

American Rieter Co., Inc.
600 Passaic Ave., West Caldwell, N. J.

EXHIBITING FIRST TIME: Rieter Model E7 comber with 8 heads; Model DO high speed draw frame with four deliveries; Model F1 14" x 7" slubber with 28 spindles; Model G4 ring spinning frame with movable spindle rail and Hebucofil aspiration and cleaning system.
PERSONNEL IN BOOTH:
F. Preysch, pres.
J. F. Dulken, vice-pres.
Dr. H. Keller, dir.
F. Meyer, asst. to pres.
R. O. Halter, exec. vice-pres.
C. Rosenthal, vice-pres. & treas.
H. Klaeui, sales eng.
W. Plowden, sou. rep.
N. L'E. Fawcett, Canadian rep.
RESIDING AT: Hotel Dennis

TEXTILE REPORTER ..... **Booth 302**

"America's Textile Reporter"
286 Congress St., Boston, Mass.

ANDERSON ..... **Booth 551**

Anderson Machine Shop, Inc.
50 Brook Rd., Needham Heights, Mass.

EXHIBITING FIRST TIME: The Pacific evenness tester with a new integrator for obtaining the average unevenness and true average thickness of sliver, roving, and yarn; the Static Measurer for measuring static electricity in the manufacturing process and in fabrics.
PERSONNEL IN BOOTH:
A. G. Anderson, sales mgr.

ARBACH ..... **Booth 823**

Maschinenfabrik Arbach
Reutlingen-Wuerttenberg, Germany
(See *COSA*)

ARMSTRONG MACHINE ..... **Booth 394**

Armstrong Machine Works
816 Maple St., Three Rivers, Mich.

EXHIBITING: A glass model of the Armstrong trap operating on 7 lb steam pressure.
PERSONNEL IN BOOTH:
T. H. Rea, gen. sales & adv. dir.
O. E. Ulrich, factory rep.
T. M. Reed, sales mgr.

ASHWORTH ..... **Booth 669**

Ashworth Bros., Inc.
Box 670, Fall River, Mass.

EXHIBITING: Card clothing for cotton, wool, worsted, synthetic, rayon, and asbestos cards; brush clothing and card clothing for special purposes, including hardened point, plough ground, and side ground card clothing; flat clothing (both regular and hardened point) for solid, split, or flexible metallic flats; metallic wire for cotton, woolen, worsted, and synthetic cards; licker-in and garnet wire; flexible bend grinding; remilling of flats; conveyor belts (woven wire) for use in non-woven textile and other textile applications.
PERSONNEL IN BOOTH:
R. C. Ashworth, Jr., pres.
W. J. Flynn, Jr., vice-pres.
H. Ashworth, treas.
F. L. Armitage, gen. mgr. wool div.
R. C. Ashworth, III, sales & service
G. A. Davis, sales & service
C. E. Lalime, sales & service
Phillip Brann, sales & service
J. E. Seacord, Jr., mgr.
Thurman Hart, sales & service
Michael Croce, sales & service
A. E. Johnston, Jr., mgr.
C. C. Withington, Jr., sales & service
W. G. Halstead, mgr.
Ray Clary, sales & service
F. W. Hale, gen. mgr.
D. J. Daylor, sales mgr.
RESIDING AT: Hotel Dennis

ATKINSON, HASERICK ..... **Booth 818**

Atkinson, Haserick & Co., Inc.
Box 509, Framingham, Mass.

EXHIBITING: Cotton and woolen system equipment of Platt Bros. (Sales) Ltd. (see PLATT); cotton carding equipment of Carding Specialists Ltd. (see CARDING SPECIALISTS); worsted system equipment of Societe Alsacienne de Constructions Mecaniques (see SACM); napping machine by Tomlinsons (Rochdale) Ltd. (see TOMLINSONS); wool oiling equipment of Spencer & Halstead (see SPENCER & HALSTEAD); narrow fabric and braider bobbin winders by Plutte, Koecke & Co. (see PLUTTE, KOECKE); a molten metal dyeing machine of Standfast Dyers & Printers Ltd. (see STANDFAST).
PERSONNEL IN BOOTH:
J. L. Coon, pres.
W. P. Rutley, vice-pres.
E. J. McVey, vice-pres.
H. H. Clinch, div. sales mgr.
C. P. Clanton, div. sales mgr.
F. E. Bozeman, tech. ser. mgr.

BAGSHAW ..... **Booth 63**

W. H. Bagshaw Co., Inc.
Nashua, N. H.

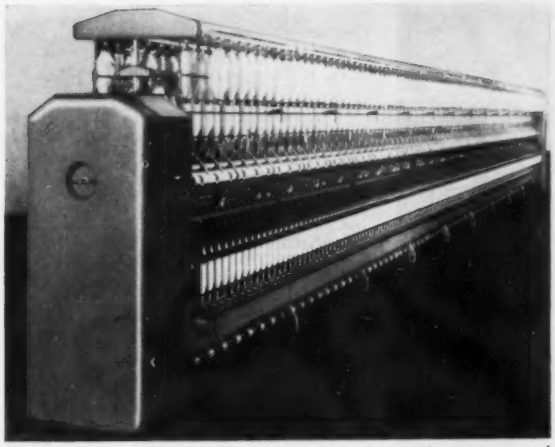
EXHIBITING: Pins and lags for opening and processing textile fibers
PERSONNEL IN BOOTH:
J. J. Bagshaw — T. W. O'Day
M. H. Bagshaw — A. K. Hall

BAHNSON ..... **Booth 11**

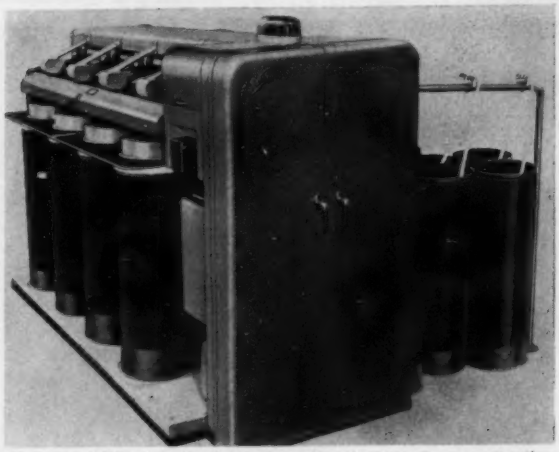
The Bahnson Co.
1001 S. Marshall St.
Winston-Salem, N. C.

EXHIBITING FIRST TIME: A vacuum floor sweeper for use with the "Cross-Jet" spinning frame cleaner.
ALSO SHOWING: "Humiduct" air conditioning; "Cross-Jet" spinning frame cleaner with floor sweeper; "Aero-Sweep" traveling ceiling cleaner; loom cleaner; "Collecto-Vac" vacuum broken end collector for spinning frames; atomizers; "Open-Aire" spinning creel.

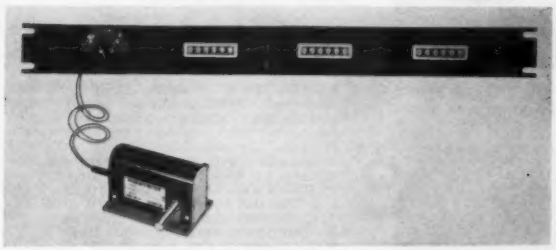
Continued on page 148



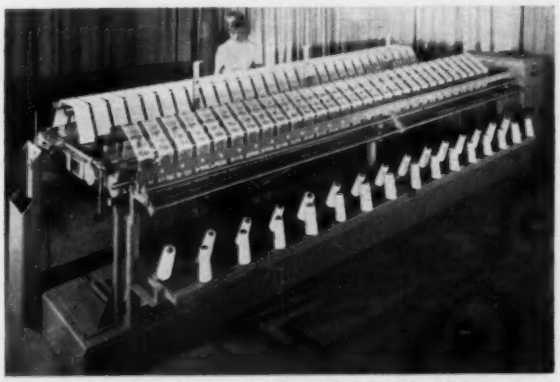
The Platt MR.4 28"-wide ring spinning frame is an all-count, general purpose machine offering high efficiency and considerable inherent flexibility. See it in Booth 943. (E-306)



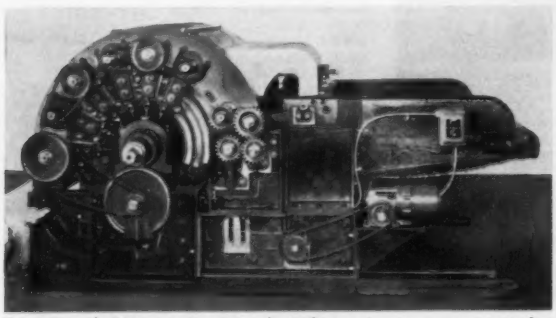
The Platt MDF.5 drawing frame is equipped with a 3-over-3 dratting system. Pneumatic waste removal is optional. Note suction hoods to prevent build-up of waste at calender roll trumpets. (E-307)



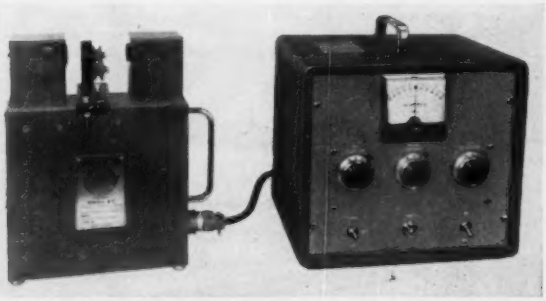
One unit of the new Durant electric pick counter system which records production of a number of looms on one panel and thus provides centralized production control. (E-310)



Croon & Lucke change reeling machine, Model W 400 K, for crimped yarn and fine cotton and worsted yarns. (E-311)



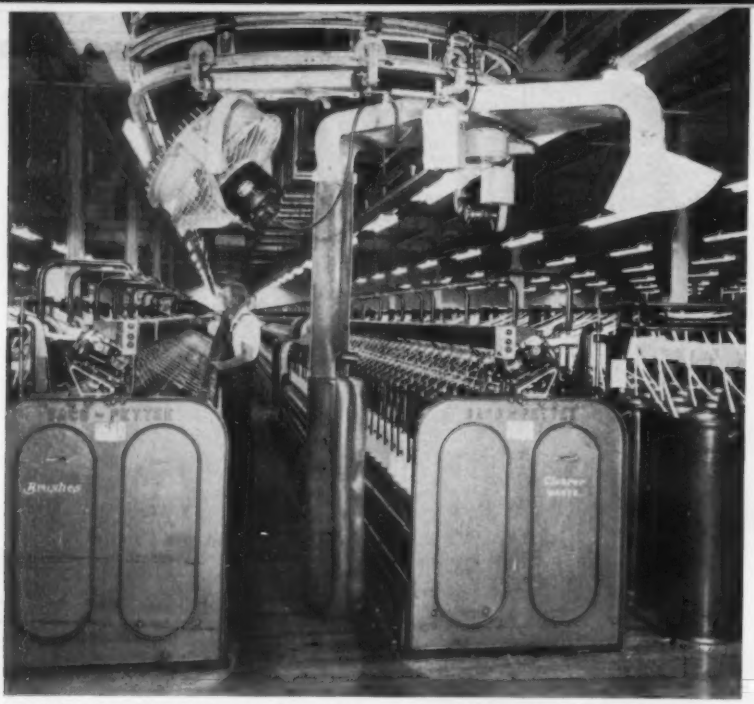
Provision of different degrees of stock opening to meet particular requirements of various mills is an advantage claimed for the new Davis & Furber Fiber Blending Opener. (E-308)



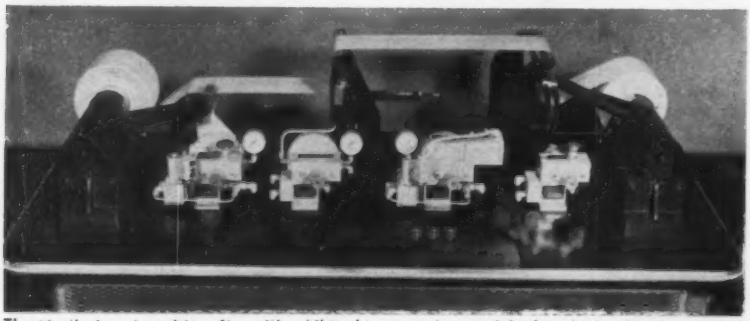
The Lindly Dyna-Micro-Gage for continuous monitoring of spun and filament yarns, etc., will be displayed by Foster Machine Co. (E-312)

The Schilde air penetration dryer for all kinds of textiles. (E-309)

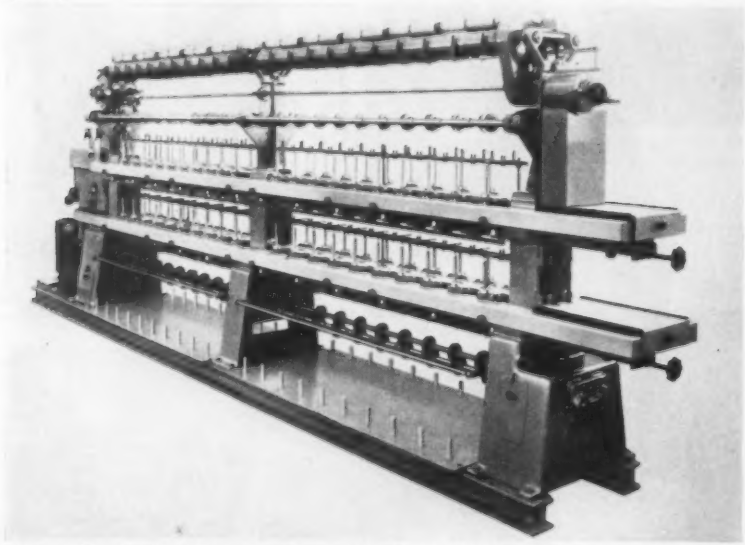
The Sant' Andrea high speed intersecting gill box, Model SD/n, with automatic evenness regulator. (E-313)



Latest American MonoRail roving frame cleaner, mill installation of which is pictured above, will be shown. Key advantage claimed for it is cleaner stops blowing when frame stops. (E-314)



The North American Mtg. Co. will exhibit this operating model of its hydraulically-powered web guiding equipment for tenter frames, examining machines, etc. Unwind and rewind edge controls will be demonstrated, operated by photoelectric and pneumatic devices. (E-315)



The Schaffhouse rubber thread covering machine, Model SUMA, may be seen in Booth 1339. Spindles are stopped individually simply by pushing them clear of driving belt. (E-316)

Bahnson continued

PERSONNEL IN BOOTH:
A. H. Bahnson, Jr., pres.
W. M. Fulp, export mgr.
A. E. Thomas, sales eng.
J. G. Browning, sales eng.
R. B. Crosland, sales eng.
I. L. Brown, sales eng.
S. B. Blanton, sales eng.
W. F. Walters, sales eng.
RESIDING AT: Claridge Hotel

BARBER-COLMAN ..... **Booths 112, 434, 450**

Barber-Colman Co.
1300 Rock St., Rockford, Ill.

EXHIBITING FIRST TIME: A 60-spindle Type FF automatic spooler.
ALSO SHOWING: 54½" DW Super-Speed warper with DC creel; GSH warp drawing machine.
PERSONNEL IN BOOTH:
R. G. Ross, vice-pres.
W. P. Turner, export sales mgr.
F. D. Taylor, off. mgr.
H. C. Schleicher, off. mgr.
RESIDING AT: Shelburne Hotel

BARCO ..... **Booth 382**

Barco Mfg. Co.
500-530 N. Hough St., Barrington, Ill.

BARMAG ..... **Booth 144**

Barmag Barmer Maschinenfabrik A.G.
Remschied-Lennep, Germany
(See U. S. TEXTILE MACHINE)

BAXTER ..... **Booth 1**

The Baxter Corp.
224 21st Ave., Paterson, N. J.

EXHIBITING FIRST TIME: Verdol Antares "250" endless paper tape double-lift Jacquard machine; Verdol Synchro "190" endless paper tape single-lift Jacquard machine; Verdol automatic card punching machine for endless paper tape cards
PERSONNEL IN BOOTH:
I. S. Baxter, pres.
J. C. Bowen, sec.
R. Thompson, sou. mgr.
P. A. Cassedy, sou. sales mgr.
W. Reilly sales
W. Luther, sales
RESIDING AT: Hotel Dennis

BEARD ..... **Booth 702**

Edward S. Beard
Box 322, Spring City, Pa.

BIRCH ..... **Booth 466**

Birch Brothers, Inc.
32 Kent St., Somerville 43, Mass.

EXHIBITING FIRST TIME: Model 7 three-roll automatic pneumatic cut-off winder; "Flexfire" ball bearing expander roll; the complete line of the new "Flightweight" mill sewing machines; all-purpose two-roll laboratory "Minicalender."
ALSO SHOWING: The Model BB 880 heavy duty, high speed stainless steel scutcher.
PERSONNEL IN BOOTH:
C. W. Birch, Jr., pres.
H. W. Birch, treas.
R. Briggs, vice-pres.
J. C. Cosby, sou. rep.
H. J. Anderson, Canadian rep.
RESIDING AT: Chalfonte-Haddon Hall

BISHOP ..... **Booth 709**

J. Bishop & Co. Platinum Works
Malvern, Pa.

EXHIBITING FIRST TIME: Small diameter stainless steel, nickel, and nickel alloy tubing for parts in textile machines and manufacturing.
ALSO SHOWING: Spinnerettes for synthetic fiber industry; platinum products for manufacture and research.
PERSONNEL IN BOOTH:
J. J. Buckley, vice-pres.
H. S. Roberts, mkt. & sales mgr.
M. Burkus, supv. platinum sales
D. G. Wise, supv. tubing sales
J. Povey, sou. sales rep.
W. Herkness, east. sales rep.
M. Hatch, adv. mgr.
C. McDonald spinnerette prod. mgr.
RESIDING AT: Hotel Claridge

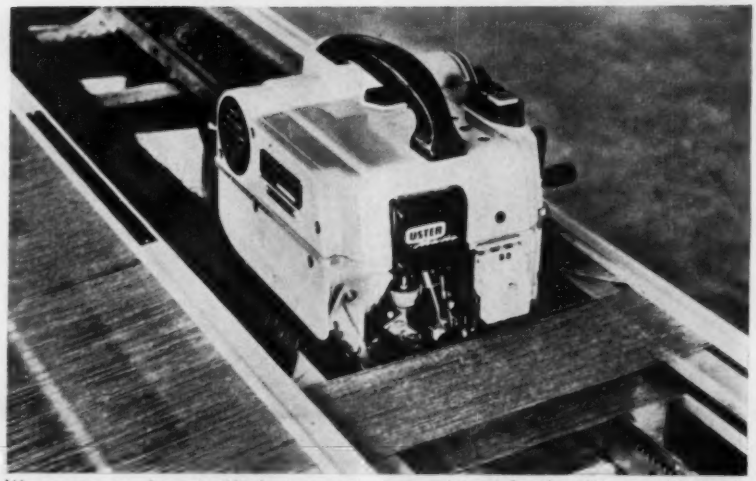
BONAS ..... **Booth 800**

Bonas Bros. Looms, Inc.
151 West 46th St., New York 36, N. Y.

EXHIBITING FIRST TIME: "Weavematic" high speed narrow fabric needle looms (Models Mark V and Mark

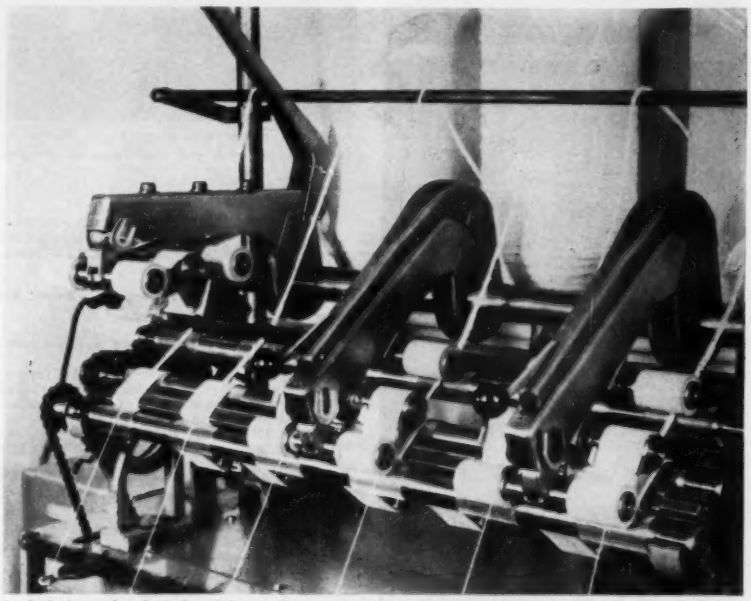
VII) capable of weaving all wide-range narrow fabrics of cotton, elastic, and man-made fiber yarns up to 3¼" wide; a warping machine.
PERSONNEL IN BOOTH:
H. G. Bonas, dir.
E. W. Rowrtree, dir.
C. Hackett, mgr.
RESIDING AT: Chalfonte-Haddon Hall

BOOTH ..... **Booth 390**
Benjamin Booth Co.
Allegheny Ave. & Janney St., Philadelphia 34, Pa.
EXHIBITING FIRST TIME: Booth Metallic, a new super-precision metallic card clothing; "Gran-O-Top," the SRRL granular card conversion unit.
ALSO SHOWING: "Micr-O-Grind" needle-point card clothing and grinding apparatus, "Supr-O-Tape" condenser tape.
PERSONNEL IN BOOTH:
E. A. Snape, Jr., pres.
Ed Snape
N. Bush, sales
W. Hurley, rep.
R. Hurley, rep.
H. Harrison, rep.
W. Gill, rep.
C. Stover, rep.
RESIDING AT: Marlborough-Blenheim Hotel



Warp tying speeds up to 600 knots per minute are claimed for the "Ustermatic" tying-in machine which is to be on display in the Uster booth. (E-317)

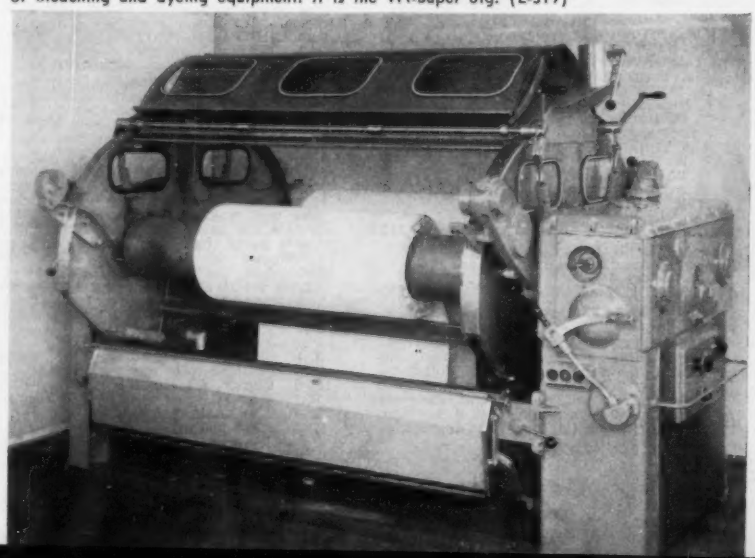
BRIGGS-SHAFFNER ..... **Booth 644**
Briggs-Shaffner Co.
500-540 Brookstown Ave., Winston-Salem, N. C.
EXHIBITING: Aluminum section beams, including a 38" unit for cotton warps; aluminum tricot beams; aluminum quill boards, dry rods, castings, and miscellaneous anodized parts.
PERSONNEL IN BOOTH:
P. H. Johnson
E. N. Shaffner, pres.
C. A. Singuefield, vice-pres.
S. A. Harris, vice-pres.


Included in the S K F exhibit will be the PK series pendulum weighting arm system and "Draftrite" roller bearing top rolls shown here. (E-318)

BRITISH NORTHROP ..... **Booth 842**
British Northrop Sales, Ltd.
Daisyfield, Blackburn, Lancashire, England
EXHIBITING FIRST TIME: Northrop high-speed, single-shuttle loom with Unifil; Northrop high-speed, four-color check loom.
PERSONNEL IN BOOTH:
G. L. G. Jackson, mgn. dir.
H. De G. Gaudin, chmn.
A. V. Lepere, dir.
J. N. B. Cardwell, sales rep.
J. K. Sugden, pub. mgr.
J. Parnell, inspector
R. Thornton, inspector
Mrs. E. Moss, demonstrator
RESIDING AT: Ritz-Carlton

BUNTING BRASS ..... **Booth 81**
Bunting Brass & Bronze Co.
715 Spencer St., Toledo, Ohio.
EXHIBITING FIRST TIME: Cast bronze special textile bearings; aluminum special bearings; sintered structural parts.
PERSONNEL IN BOOTH:
W. J. McTighe, sales mgr. spec. div.
P. E. Holt, dist. mgr.
W. C. Bracken, dist. mgr.

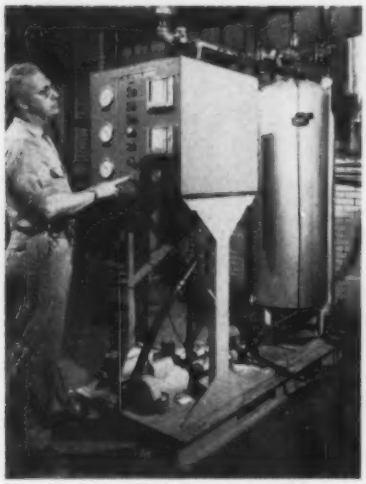
Edda International chose to show this totally enclosed dye jig from the Henriksen line of bleaching and dyeing equipment. It is the VH-Super Jig. (E-319)



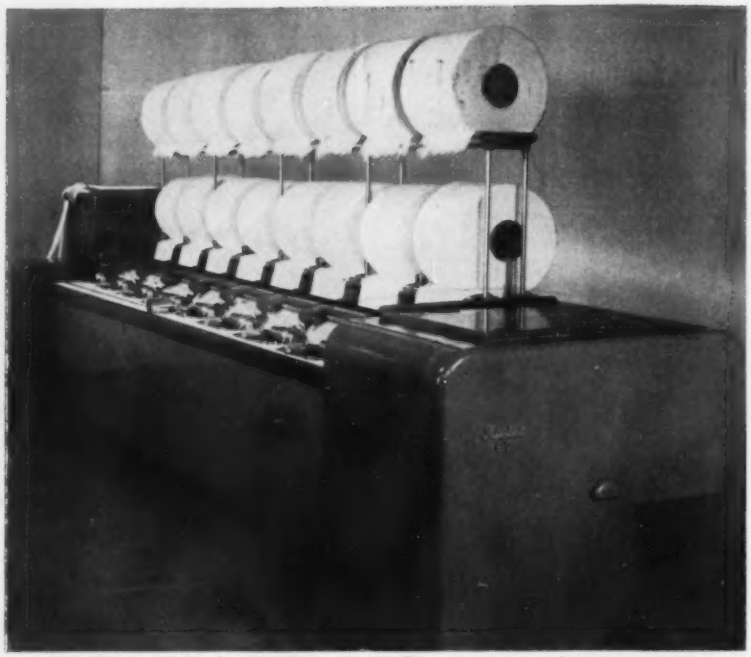
BUSER ..... **Booth 1208**
Fritz Buser Engineering Works
Wiler, Switzerland
(See JUNGFRAU)

BUTTERWORTH ..... **Booth 621**
H. W. Butterworth & Sons Co.
Bethayres, Pa.
EXHIBITING FIRST TIME: A winder featuring a new concept of cutting and doffing; a six-needle sewing machine; a new method of applying pressure pneumatically to printing machine mandrels; a new compartment washer; a six-cylinder dryer; a variety of new tenter clamps; laboratory padding machine; the latest high-

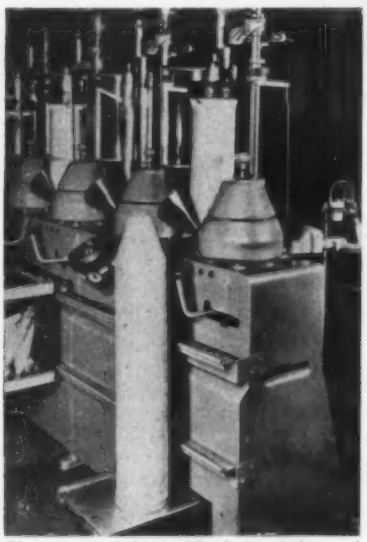
WHAT YOU'LL SEE IN ATLANTIC CITY



See this Staley High-Temperature Converter for automatic preparation of warp size from unmodified corn starch in Booth 165. (E-320)



American Rieter will display this Rieter Model E7 cotton comber featuring speeds up to 180 nips per min and noil removal ranging from 5% to 25%. (E-322)



Close-up of Delerue "Rocket" winder and one of its coreless packages (foreground) that hold as much as 9 lb of yarn. Interstate will show it. (E-321)

speed tentering machine in operation.
PERSONNEL IN BOOTH:
J. E. Butterworth, pres.
D. Butterworth, exec. vice-pres.
S. Brooks, vice-pres., sales
T. M. Davis, Jr., asst. sales mgr. & export mgr.
J. J. Sippel, asst. sales mgr.
T. W. Kitchen, sales rep.
G. W. Marks, sales rep.
V. A. Jones, sales rep.
H. E. Whitaker, sales rep.

CANADIAN TEXTILE JOURNAL ..... **Booth 753**
Canadian Textile Journal Pub. Co., Ltd.
223 Victoria Ave., Montreal, Que., Can.

CALLEBAUT ..... **Booth 851**
Ets. Callebaut-De Blicquy, S. A.
Brussels, Belgium

EXHIBITING: A totally enclosed universal high temperature dyeing and bleaching machine, Model "React-O-Mat," with dyestuffs dissolving pan and carrier for crosswound cheeses; a cupboard type skein dyeing machine for wool, cotton, synthetics; automatic, high-temperature, laboratory dyeing machines for dyeing raw stock, sliver, yarn, and cloth.

CARDING SPECIALISTS ..... **Booth 818**
Carding Specialists Co., Ltd.
Mirfield, Yorkshire, England
U. S. AGENTS: Atkinson, Haserick & Co., Inc., Box 509, Framingham Mass.

EXHIBITING: The "Crosrol" cotton web purifier attachment for cotton cards; "Eureka" card tops, manufactured by de Spa & Figli Italy.
PERSONNEL IN BOOTH:
A. Varga A. Jamar

CARDPEN ..... **Booth 240**
Societa Italiana Cardpen S.r.L.
Bergamo, Italy
(See *ABINGTON*)

CARNITI ..... **Booth 1336**
A. Carniti & C.
Oggiono, Como, Italy
(See *STELLAMCOR*)

CAROLINA FIBERGLASS ..... **Booth 1205**
Carolina Fiberglass Products Co.
510 E. Jones St., Wilson, N. C.

EXHIBITING FIRST TIME: Fiberglass dye containers, vats, tubs, buckets, cloth boxes, etc.
PERSONNEL IN BOOTH:
R. P. Watson, Jr., pres.
W. N. Conoley, exec. vice-pres.
D. L. Collins, sec.-treas.
I. R. Gunn, acct.

CARTER ..... **Booth 39**
A. B. Carter, Inc.
226 Linwood St., Gastonia, N. C.

EXHIBITING FIRST TIME: Boyce Fisherman's Knotter for tying synthetic and worsted yarns with a knot that will hold; the Phantom drafting system for spinning frames which has fewer parts than conventional systems (produced by Cole Eng. Corp. of Columbus, Ga.)
ALSO SHOWING: Spinning and twisting travelers; Boyce weaver's knotters; automatic screw machine parts and contract services.
PERSONNEL IN BOOTH:
J. K. Davis, sales eng.
D. E. Phillips, sales eng.
P. L. Piercy, sales eng.
W. T. Horton, sales eng.
B. R. Line, sales eng.
J. R. Richie, sales eng.

A. B. Carter continued
P. R. Stroup, mgr. traveler dept.
J. B. Carter, prod. mgr.
E. H. Gregg, sec. treas.
RESIDING AT: Claridge Hotel

CHANDLER ..... **Booth 326**
Chandler Machine Co.
West St., Ayer, Mass.

EXHIBITING FIRST TIME: A new power-operated sample cutting machine.
ALSO SHOWING: A permanent pleating machine; several sizes of hand-operated sample (swatch) cutting machines.
PERSONNEL IN BOOTH:
R. C. Maxant, sec.
RESIDING AT: Traymore Hotel

CHEMSTRAND ..... **Booth 71**
The Chemstrand Corp.
350 Fifth Ave., New York, N. Y.

C.I.T. ..... **Booth 1218**
C.I.T. Corp.
650 Madison Ave., New York 22, N. Y.

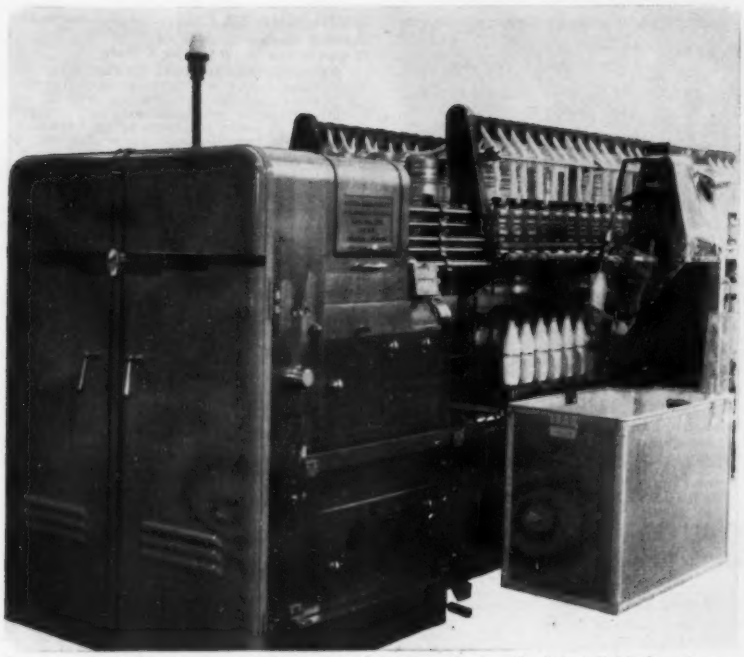
EXHIBITING: Literature on services available for the financing of textile machinery.
PERSONNEL IN BOOTH:
E. T. Neville, vice-pres.
RESIDING AT: Colony Motel

CLARK-CUTLER-McDERMOTT ..... **Booth 288**
Clark-Cutler-McDermott Co.
Franklin, Mass.

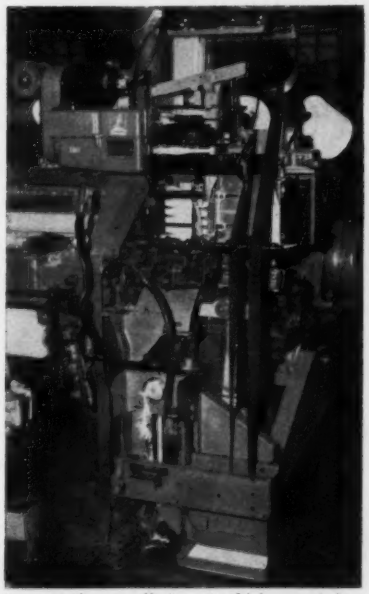
CLARK DOOR ..... **Booth 58**
Clark Door Co.
515 Hunterdon St., Newark 8, N. J.

EXHIBITING FIRST TIME: A shock absorber door for use where frequent opening by lift trucks, hand trucks, and personnel is required.
ALSO SHOWING: "PrestOmatic" complete automatic industrial door units.
PERSONNEL IN BOOTH:
H. B. Clark, pres.
H. B. Clark, Jr., sales mgr.
E. Wiegleb, salesman
G. J. Valk, salesman

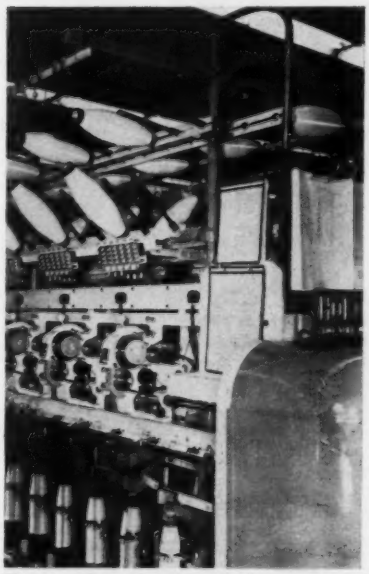
CLEVELAND WORM & GEAR ..... **Booth 298**
The Cleveland Worm & Gear Co.
3249 E. 80th St., Cleveland 4, Ohio
(See *EATON*)



An automatic doffer (extreme right in photo) in operation on the latest O-M sliver-to-yarn spinning frame will be a highlight of the Edward S. Rudnick exhibit. (E-323)



Leesona Corp. will show Unifil loom winders in operation on X2 and XD looms weaving cotton and synthetic fabrics. (E-324)



This 2110 Edge Crimping Machine is one of two types of Agilon-producing units which may be seen in the Deering Milliken booth. (E-325)

CLINTON CORN ..... **Booth 62**

Clinton Corn Processing Co.
Clinton, Iowa

EXHIBITING: Space for visitors.
PERSONNEL IN BOOTH:
A. C. Junge, vice-pres. sales
R. C. Rau, gen. sales mgr. sou. div.
C. F. Cline, Jr., dist. mgr.
C. W. Hite — G. Gilbert
E. F. Patterson — B. L. Estes
J. Finley — G. Henderson
RESIDING AT: The Shelburne

COATS & CLARK ..... **Booth 417**

Coats & Clark, Inc.
1292 McCarter Highway, Newark 4, N. J.

EXHIBITING: Nylon twister travelers.
PERSONNEL IN BOOTH:
R. H. Wilcox, mgr. traveler div.
T. B. Farmer, sales eng.
M. H. Cranford, sales eng.
H. A. Carter, sales eng.
RESIDING AT: Hotel Dennis

COCKER ..... **Booth 615**

Cocker Machine & Foundry Co.
P. O. Box 431, Gastonia, N. C.

EXHIBITING FIRST TIME: Model GH slasher; a tricot warper; a section beam warper; the Nemo Jet Cooker.
PERSONNEL IN BOOTH:
J. Cocker, III, pres.
O. L. Davis, sales dept.
T. F. Suggs, ch. eng.
J. C. Bodansky, vice-pres. & sales mgr.
F. H. Cunningham, Jr., sales dept.
J. L. Etheredge, sales dept.
RESIDING AT: Hotel Dennis

COLE ..... **Booth 39**

Cole Engineering Corp.
Columbus, Ga.
(See *CARTER*)

COLLINS ..... **Booth 8**

Collins Brothers Machine Co.
647 Roosevelt Ave., Pawtucket, R. I.

COOK ..... **Booth 266**

Cook Machine Co., Inc.
Lowell, Mass.
(See *RIGGS & LOMBARD*)

CORN PRODUCTS ..... **Booth 295**

Corn Products Sales Co.
1 E. 43rd St., New York 17, N. Y.

EXHIBITING FIRST TIME: A small starch cooker.

Corn Products continued

PERSONNEL IN BOOTH:
J. R. Hill — G. Wood
W. R. Joyner — R. Miller
P. A. Donaghy, Jr. — C. Spencer
C. C. Hassman — H. Harris
J. A. Simpson — H. Plimpton
D. Jenkins — R. W. Bond
J. Adcock — T. A. Bruce
A. A. Harden — P. A. Donaghy, Sr.
E. G. King — J. Seawall
T. Blackwell — F. J. Holsinger
RESIDING AT: Hotel Dennis

COSA ..... **Booth B24**

Cosa Corp.
405 Lexington Ave., New York 17, N. Y.

EXHIBITING FIRST TIME: The Arbach steaming and finishing machine; a model of the Stork "Rope-O-Matic" washing machine; a Schilde air penetration dryer; Sahm high-speed precision winders; a Kettling & Braun napping machine for knitted fabrics; Scholl package extractor and dryer and laboratory dyeing machine; Erhardt & Leimer cloth feeders, selvage guides, and iron detector; Mettler skein-to-can winder, yarn singeing machine and doubler winder; and Croon & Lucke reeling machines.
PERSONNEL IN BOOTH:
W. Swatek, European mgr.
O. J. Guttman, U. S. mgr.
R. H. Meadows, sales eng.
H. J. Korndoerfer, sales eng.
F. Saxer, asst. mgr.
G. Sahm, pres. Georg Sahm
W. Schmidli, sales mgr. Croon & Lucke
J. Nieding, eng. Schilde
L. Schmidt, ch. eng. Erhardt & Leimer
H. Mettler, dir. Mettler
I. Meyer, mgr. Mettler
S. Eberhard, tech. mgr. Scholl
Mr. Vetterlein, ch. eng. Kettling & Braun

COTTON-McCAULEY ..... **Booth 118**

Cotton-McCauley & Co., Inc.
188 Main St., Pawtucket, R. I.

EXHIBITING: "Cleanguide" spinning changeover; "Climax" ball bearing top rolls; "Cleandraft" nylon top rolls for spinning and roving frames; fabricated roll stands with spring weighting.
PERSONNEL IN BOOTH:
F. H. Cotton, pres.
R. L. McCauley, vice-pres.
R. K. Butler, gen. mgr. Machinecraft

Cotton-McCauley continued

J. B. Howarth, sales eng.
C. A. McAbee, sales eng.
H. H. Robbins, tech. vice-pres. Latin America
RESIDING AT: Hotel Dennis

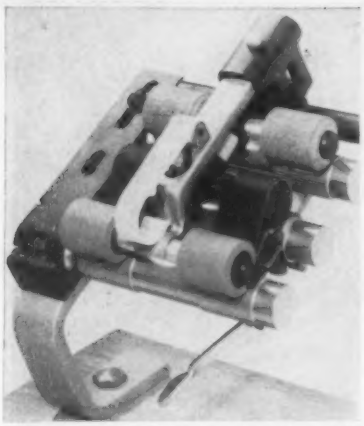
COTTON TRADE JOURNAL ..... **Booth 755**

"Cotton Trade Journal"
Hickman Bldg., Memphis, Tenn.

COURTAULDS ..... **Booth 33**

Courtaulds (Alabama) Inc.
600 Fifth Ave., New York, N. Y.

EXHIBITING: "Coloray" solution-dyed rayon; "Topel" and "Corval" cross-linked rayons; fibers, yarns, fabrics, and end products made with them; technical information on spinning.



The "Cleanguide" spinning changeover will be featured by Cotton-McCauley. (E-326)

The Lincoln "Lubrigun," an electric-motor-operated, portable grease dispensing machine. (E-327)

The Gabb "Shear-Flow" mixer for wet processing plants and other textile mill uses. (E-328)

knitting, weaving, dyeing, and finishing these fibers.
PERSONNEL IN BOOTH:
R. E. Dunford, dir. mkt. dev. and pub. rel.
H. M. Carter, Jr., mkt. and mdse. mgr.
G. Lund, mgr. tex. res. and dev.
A. B. Hilton, tex. finishing
W. E. Totten, adv. mgr.
G. Stanley, mdse. mgr. apparel
N. Casey, mdse. mgr. home furn.
Rose Simmons, home furn.
Nancy Wolf, apparel
W. Ward, sales mgr.
T. G. Etheridge, sales rep.
D. Bell, Jr., sales rep.

CRABTREE ..... **Booth 1200**

Crabtree Textile Accessories Ltd.
Stonebridge Works, Windy Bank, Colne, Lancs. England

EXHIBITING FIRST TIME: Card clothing; stainless steel dyeing tubes and cones; springs (compression, tension, flat, etc.); "Ceracote" aluminum oxide coating for thread guides; "Setasatin" guides.
ALSO SHOWING: "Sintox" hard ceramic thread guides (Alumina); tension devices of all types, including "Telepathic" compensator for seamless hose machines; "Mirrobrite" guides.
PERSONNEL IN BOOTH:
John Crabtree, mg. dir.
Jean Crabtree, dir.
J. B. Ashworth, sales mgr.
RESIDING AT: Marlborough-Blenheim

CROMPTON & KNOWLES ..... **Booth 360**

Crompton & Knowles Corp.
Worcester 1, Mass.

EXHIBITING FIRST TIME: A Model C-7 automatic bobbin changing dobby loom weaving terry toweling; a Model C-7-S automatic bobbin changing dobby loom weaving fine filament fabrics for dress goods.
ALSO SHOWING: A needle loom weaving two 1½" wide tapes simultaneously and side by side; a PAPA (pick and pick automatic) loom weaving an upholstery fabric; a 1304-hook, double-lift, double-cylinder Jacquard mounted at eye level to show up-to-date features.
PERSONNEL IN BOOTH:
F. W. Howe, Jr., pres. & gen. mgr.
A. Palmer, vice-pres.-eng.
J. F. Molloy, vice-pres.-sales
J. C. Irvin, sou. mgr.
W. O. Fisher, pres. C. & K. International, Ltd.
W. C. Howe, north. sales mgr.
J. H. Doyle, sales rep.
A. Begum, sales rep.
T. D. Craig, sales rep.
W. G. Hjerpe, sales rep.
J. Hewitt, sales rep.
A. M. Herman, sales rep.
A. F. Ballantyne, Canadian sales rep.
R. A. Sharpe, field eng.
H. C. Wingard, sales rep.
L. Burgess, sales rep.
R. S. Schedin, ch. eng.
V. F. Sepavich, mgr. res. dev.
H. V. Foster, gen. mgr. C & K Jacquard & Supply Co.
RESIDING AT: Dennis Hotel

CROON & LUCKE ..... **Booth 924**

Croon & Lucke G.m.b.H.
Wuerttenberg, Germany

U. S. AGENT: Coco Corp., 405 Lexington Ave., New York 17, N.Y.

EXHIBITING FIRST TIME: Change reeling machine (Model W 400 K) for production of muffs of crimped yarn for dyeing; double reeling machine (Model S 2/150) for making skeins from medium and coarse yarns.
PERSONNEL IN BOOTH:
W. Schmidli, sales mgr.
RESIDING AT: Marlborough-Blenheim Hotel

CURLATOR ..... **Booth 278**

Curlator Corp.
501 W. Commercial St., East Rochester, N. Y.

EXHIBITING FIRST TIME: Model 40-B "Rando-Feeder" and "Rando-Webber" used in production of non-woven fabrics and batting.
PERSONNEL IN BOOTH:
J. W. Ingle, pres.
H. H. Langdon, vice-pres.
G. B. Harvey, sales mgr.
J. R. Schurz, sales eng.
R. R. Castor, tech. ser.
W. H. Francis, eng.
RESIDING AT: Lombardy Hotel

CURTIS & MARBLE ..... **Booth 157**

Curtis & Marble Machine Co.
72 Cambridge St., Worcester 3, Mass.

EXHIBITING FIRST TIME: The SL selvage shear for fabrics made on the Draper shuttleless loom, as well as on all types of goods from light weight gauze to heavy denims, terry toweling, blankets, and sleazy glass fabrics; a portable rug shear; a portable detacker; railway sewing machine for reinforced selvage seams.
ALSO SHOWING: The M-125 cloth folder.
PERSONNEL IN BOOTH:
W. E. Hildick, pres. & treas.
W. F. Woodward, vice-pres. sales
L. F. Remington, vice-pres. mfg.
H. B. Russell, r & d eng.
J. Federline, sou. mgr.
J. Stanley, sou. rep.
RESIDING AT: Traymore Hotel

CUSTOM SCIENTIFIC ..... **Booth 476**

Custom Scientific Instruments, Inc.
541 Devon St., Kearny, N. J.

EXHIBITING FIRST TIME: The "Quill-Chek," a quill runout testing machine developed by West Point Mfg. Co.; gear runout tester; roll runout indicator; traveler hardness tester.
PERSONNEL IN BOOTH:
H. J. Bultman, Jr.
R. J. Novotny

CUTLER-HAMMER ..... **Booth 80**

Cutler-Hammer, Inc.
315 N. 12th St., Milwaukee, Wis.

DAILY NEWS RECORD ..... **Booth 395**

"Daily News Record"
7 East 12th St., New York 3, N. Y.

DAVIDSON-KENNEDY ..... **Booth 482**

Davidson-Kennedy Co.
1090 Jefferson St. N. W., Atlanta, Ga.
(See *SACO-LOWELL*)

DAVIDSON, MACGREGOR ..... **Booth 1139**

Davidson, MacGregor & Co., Ltd.
Hartley Wintney, England

EXHIBITING FIRST TIME: Stainless steel dye springs that make possible 25 per cent more packages per machine load.
ALSO SHOWING: The Atlas automatic tube wrapping machine.
PERSONNEL IN BOOTH:
E. Davidson, dir.
P. F. Atchinson, mdse. mgr.
RESIDING AT: Shelburne Hotel
U. S. agent: Davidson Industries Inc., 430 Park Ave., New York 22, N. Y.

DAVIS & FURBER ..... **Booth 527**

Davis & Furber Machine Co.
North Andover, Mass.

EXHIBITING FIRST TIME: The Model H ring spinning frame with advantages of higher production, easier maintenance, and safer operation; the Model L-5A tape condenser with a traversing winding frame on a 1960 Model L 84" woolen card which is designed to provide better uniformity of ends and higher production; a 60"-wide, two-cylinder synthetic sliver card for high production of a well-controlled sliver for high pile knitting machines; a fiber blending opener that provides different degrees of stock opening to meet particular requirements of various mills; the "Selectrite" napper featuring push-button positive energy control.

DAVISON ..... **Booth 424**

Davison Publishing Co.
Ridgewood, N. J.

DEAN ..... **Booth 123**

Dean Products, Inc.
1048 Dean St., Brooklyn 38, N. Y.

EXHIBITING FIRST TIME: "Panel-coil" heating and cooling panels for use in preparation, dyeing, drying, and finishing of textiles.
PERSONNEL IN BOOTH:
W. Raskin, gen. mgr.
R. Raskin, sales mgr.
M. W. Ehrlich, ch. eng.

DEERING MILLIKEN ..... **Booth 124**

Deering Milliken Research Corp.
P. O. Box 1927, Spartanburg, S. C.

EXHIBITING FIRST TIME: The Model 2110 edge crimping machine for crimping in a single step thermoplastic multi-filament yarns in the range of 20 to 200 denier; a Model 2086 edge crimping machine for crimping in one

step thermoplastic multi-filament yarns in the range from 5 denier to 100 denier.
PERSONNEL IN BOOTH:
R. B. Newton, pres.
N. C. Armitage, vice-pres.
C. G. Evans, dept. head-Agilon res.
J. W. Whitworth, res. eng.
W. E. Moss, Agilon div. mgr.
RESIDING AT: Ritz-Carlton Hotel

DELERUE ..... **Booth 1535**

Delerue & Cie.
93 rue des Fort, Roubaix, France

(See INTERSTATE)

DIEHL ..... **Booth 289**

Diehl Mfg. Co., Finderne Plant
Somerville, N. J.

EXHIBITING FIRST TIME: Automatic tension control equipment, including the "Auto-Tension Control" for unspooling fine gauge material such as yarn, wire, etc., at a constant and predetermined tension through a wide range of speeds and the "A.C. Automatic Tension Control" for precision regulation of tension in the reeling and re-reeling of cordage, tape, yarn sheets, fabrics, etc.; servo components for automatic control, including a motor with automatic control for Whitin roving frames.
ALSO SHOWING: Power Transmitters (clutch-brake drives) and motors for looms, spinning frames, roving frames, winders, etc.
PERSONNEL IN BOOTH:
A. R. Booth, vice-pres. sales
R. H. Hanson, dist. mgr.
K. L. Trostle, dist. mgr.
J. S. Wood, dist. mgr.
A. J. Murphy, br. mgr.
F. A. Yates, ch. eng.
E. P. Turner, ch. res.
L. A. Wendel, dev. eng.
V. Marchuk, eng.
E. F. Hall, asst. to pres.
W. B. Hunter, mgr. mil. prod.
J. C. Ike, sales eng.
RESIDING AT: Ritz-Carlton Hotel

DIXON ..... **Booth 76**

Dixon Corp.
Burnside St., Bristol, R. I.

EXHIBITING FIRST TIME: "Tension weighting," a new method for weighting top rolls of spinning frames which does not require weights, springs, or magnets but is accurately adjustable and measurable; "Cavalla-Roth," a new fiber control method to improve breaking strength and evenness on long bottom apron drafting systems; "2-Apron Shaw," a minimum changeover to convert single-apron Shaw spinning to a two-apron system for higher drafts and better fiber control.
ALSO SHOWING: Spinning frame changeovers including single apron Z spinning to "2 Apron ZDR" for drafting short or long staple fibers, Roth to double apron Rotn for high drafts and better yarn control, and Casablancas types for improved cotton and blended fiber performance; spinning changeover components such as roll stands, gearing, and new type steel rolls.
PERSONNEL IN BOOTH:
R. R. Miller, pres.
W. H. Tabor, vice-pres.
V. L. Pierannunzi, vice-pres.
RESIDING AT: The Shelburne

DRACUP ..... **Booth 1432**

Samuel Dracup & Sons, Ltd.
Lane Close Mills, Great Horton, Bradford 7, Yorkshire, England

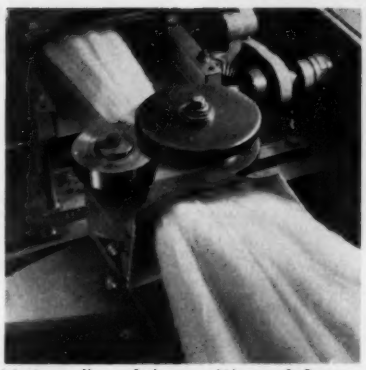
U. S. AGENT: International Sales Management Co., 123 N. Poplar St., Charlotte 2, N. C.

EXHIBITING: ¾ double Wilton and ¾ single Wilton carpet Jacquards.
PERSONNEL IN BOOTH:
R. W. Shackleton, gen. mgr.
RESIDING AT: Hotel Dennis

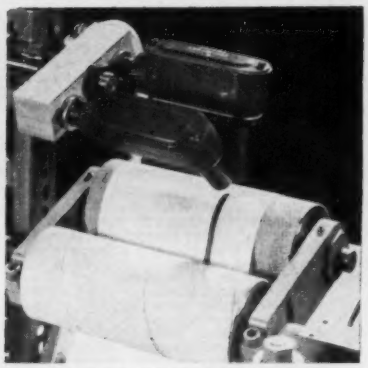
DRAPER ..... **Booths 115, 439, 455**

Draper Corp.
Hopedale, Mass.

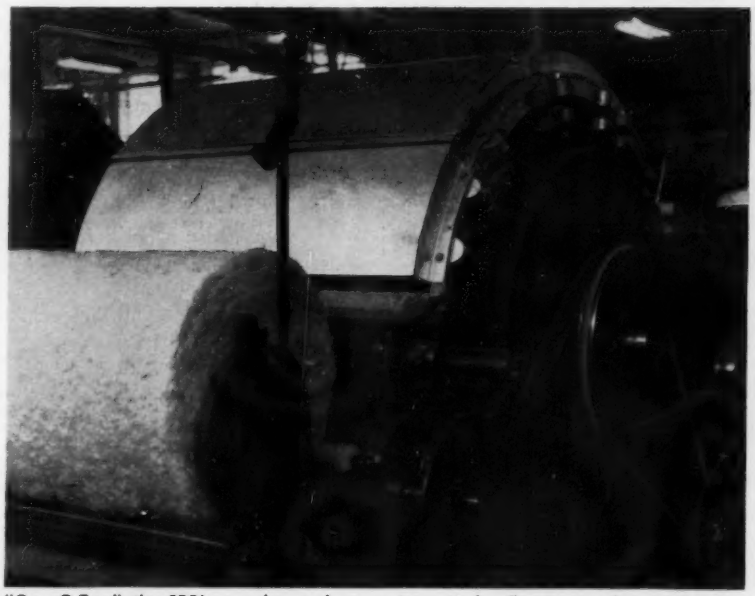
EXHIBITING FIRST TIME: Three D.S.L. Draper shuttleless looms—a 40" model operating at 250 ppm weaving a sports denim fabric, a 50" model operating at 238 ppm weaving a spun rayon flannel, and a 46" model weaving a gauze (two-harness plain weave) and operating at slow speed to permit close inspection of the loom and its mechanism; a 50" X-3 model conventional type loom, operating at 200 ppm and weaving a dress goods fabric of acetate yarn (this is a new loom



Mating rollers of the new Warner & Swasey "Servo-Drafter" intersecting draw frame which is to be on display. The rollers detect even minute variations in entering stock weight, enabling machine to deliver very uniform sliver. (E-329)

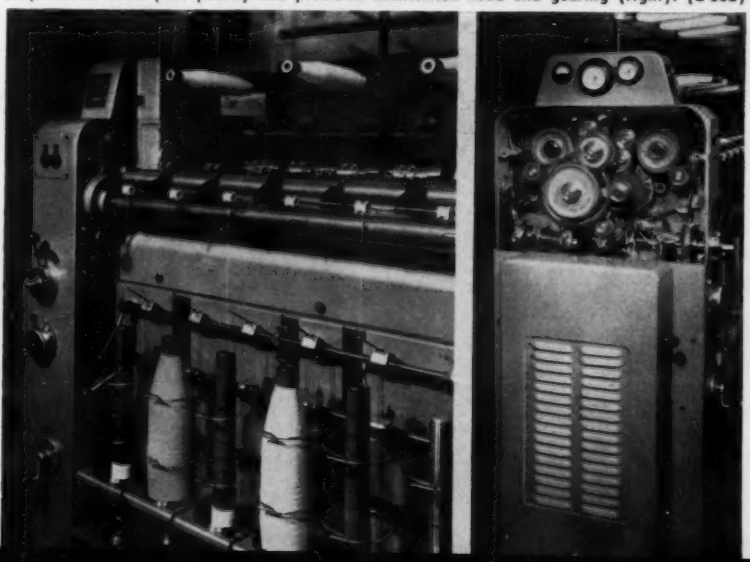


Close-up of a G P E Controls display featuring the Model 558-AL1-PJ Edge Guide Regulator. Shown here is the line follower sensing head in actual application with a guide roll which is guiding a printed line in a machine. (E-330)



"Gran-O-Top," the SRRL granular card conversion unit for flat top cards, may be seen in the Benjamin Booth exhibit. In this photo note absence of conventional flats. (E-331)

High production is claimed for the Saco-Lowell/Allma twister which features an automatic stop motion feed (left photo) and precision antifriction head end gearing (right). (E-332)



designed to weave all fabrics normally woven on X-2 looms and many synthetic fabrics commonly woven on the XD); a 72" XB model loom, operating at 166 ppm and weaving a suiting fabric from a blend of nylon, acetate, and viscose (this is a new loom designed primarily to weave heavy suitings).
ALSO SHOWING: Shuttles; bobbins; rings; spindles; and loom accessories.

DUDLEY, GARLAND & JENSEN.....Booth 757

Dudley, Garland & Jensen, Inc.
126 Gould St., Needham Heights, Mass.
EXHIBITING FIRST TIME: A gas-fired combustion system for conversion of tenter frames, loop dryers, etc., for drying and curing.
PERSONNEL IN BOOTH:
G. W. Garland, pres.
L. S. Holbrook, sales eng.
J. L. Dudley, treas.
J. R. MacIntosh, sales eng.
RESIDING AT: Baronet Motel

DUESBERG-BOSSON .....Booths 703, 1132

Duesberg-Bosson of America, Inc.
North Main St., Jefferson, Mass.

DU PONT .....Booths 1235, 1304

E. I. du Pont de Nemours & Co., Inc.
Wilmington 98, Del.
EXHIBITING: Samples of various man-made fibers produced by Du Pont, including the newest fibers developed.

LA DURANITRE .....Booth 803

La Duranitre S.A.
99 rue Grande Foxhalle, Herstal near Liege, Belgium
U. S. AGENT: Stellamcor, Inc., 10 E. 43rd St., New York 17, N.Y.
EXHIBITING FIRST TIME: A dual-delivery, dual-head (5 ends up) Auto-Leveller "Autocalibreur" for worsted system mills which is equipped with twin leveling heads for leveling two slivers simultaneously; a six-delivery, single-head (12 ends up) non-intersecting type gill box which produces up to 220 lb per hr.
PERSONNEL IN BOOTH:
J. Sauvage, gen. mgr.
P. Ducate, rep.
RESIDING AT: The Ambassador

DURANT .....Booth 292

Durant Mfg. Co.
1973 N. Buffum St., Milwaukee 1, Wis.
EXHIBITING FIRST TIME: An electric pick counter which records production of a number of looms on one panel to provide centralized production control.
ALSO SHOWING: Doffmeters, lineal measuring counters, predetermined counters, thread meters, tachometers, stroke and rotary counters.
PERSONNEL IN BOOTH:
L. A. Nourie, reg. mgr.
R. B. Winkler, exec. vice-pres.
J. K. McGinley, gen. sales mgr.
E. W. Crane, reg. mgr.
B. F. Deming, export mgr.
A. Holmes, reg. mgr.

DYNAMATIC .....Booth 298

Dynamatic Div. Eaton Mfg. Co.
739 E. 140th St., Cleveland 10, Ohio
(See *EATON*)

EATON .....Booth 298

Eaton Mfg. Co.
Cleveland 10, Ohio
EXHIBITING: Cleveland Worm & Gear Div.—A new line of fan-cooled speed reducers which are capable of transmitting up to 80 per cent more horsepower than that carried by conventional worm gear units; worms and gears for built-in drives; variable speed drives with built-on motors for compactness to make them adaptable to existing machinery. Farval Div.—Centralized lubrication systems and components; the Farval-Tanway system designed to economically serve the lubrication requirements for small machines.

EDDA .....Booth 1227

Edda International Corp.
468 Fourth Ave., New York 16, N. Y.
EXHIBITING FIRST TIME: The Maxbo shuttleless loom which is manufactured by Southeastern Loom & Machine Works (Booth 1229) under license from A. B. Maxbo of Sweden; Henriksen bleaching and dyeing machinery; loom supplies.
ALSO SHOWING: Titan warp tying machines; Excelsior reed cleaning and polishing machines.
PERSONNEL IN BOOTH:
B. Gudjonsson — H. H. Thacker
H. A. Nagel — R. J. Farr
H. Lindqvist
RESIDING AT: The Shelburne Hotel

EGAN .....Booth 751

Frank W. Egan & Co.
Box 671 South Adamsville Rd., Somerville, N. J.
EXHIBITING FIRST TIME: An electric ironing machine for softening and applying luster to face-finished woolen and synthetic fabrics and to high pile fabrics; coating machines for applying latex to pile fabrics and vinyl coatings to imitation leather materials; high velocity dryers which provide faster drying and require less floor space.
PERSONNEL IN BOOTH:
A. Schnitzer, rep.
R. Sturken, vice-pres.

ELECTRIC REGULATOR .....Booth 385

Electric Regulator Corp.
Pearl St., Norwalk, Conn.

ENGINEERED PLASTICS .....Booth 301

Engineered Plastics, Inc.
Chase St., Gibsonville, N. C.

ERHARDT & LEIMER .....Booth 821

Erhardt & Leimer
Augsburg, Germany
(See *COSA*)

EXTREMULTUS .....Booth 388

Extremultus, Inc.
25-11 40th Ave., Long Island City 1, N. Y.
EXHIBITING FIRST TIME: Cotton and woolen card belts; twister belts; roving frame cone belts.
ALSO SHOWING: Plastic core belting; a machine for actually testing the elastic properties of the Extremultus belting; a device to demonstrate the greater coefficient of friction provided by the material; a roving frame cone drive in operation with the narrower Extremultus belt which improves building action and produces a firmer package.
PERSONNEL IN BOOTH:
K. Tsunoda, pres.
G. L. Pellicer, vice-pres.
C. G. Rivers, sales mgr.
RESIDING AT: The Shelburne

FABRIONICS 18A

Fabrionics Corp.
P. O. Box 521, Huntington, L. I., N. Y.
EXHIBITING FIRST TIME: Rothschild coefficient of friction meter for measuring coefficients of friction for winding, twisting, spinning, beaming, and knitting machines.
ALSO SHOWING: The "Warp Yarn Monitor" which automatically detects defects in yarn during warping and electrically counts defects above preselected size; the "Detect-All" attachment for the Warp Yarn Monitor which provides instant linear as well as diameter discrimination; the "Una-Mag" tension control for warping, weaving, knitting, winding, twisting, coning; "The Watchman," a multi-channel recorder which constantly monitors manually-operated or automatic machinery; the Rothschild "Tensotron."
PERSONNEL IN BOOTH:
V. F. Lynch, pres.
O. Marks, mgr. tech. ser. dept.
K. Inderfurth, sales rep.
W. Crawley, sales rep.

FAFNIR .....Booth 282

The Fafnir Bearing Co.
Booth St., New Britain, Conn.
EXHIBITING: Ball bearings and ball-bearing power transmission units.
PERSONNEL IN BOOTH:
R. W. Powell, vice-pres. sales
H. S. Frisbie, div. mgr. sales
C. A. Berg, eng. mgr. spec. applications
R. W. Parkinson, application eng.
N. B. Bagger, mgr. mkg. ser.
C. W. Jones, Jr., adv. mgr.
C. M. Thomas, dist. mgr.
J. V. Lansing, dist. mgr.
J. P. Golden, reg. mgr.
R. B. Bramhall, dist. mgr.
E. M. Hayden, Jr., dist. mgr.
RESIDING AT: Hotel Claridge

FAMATEX .....Booth 1331

Famatex, G.m.b.H.
Stuttgart-Kornwestheim, West Germany
(See *REINER*)

FARMINGDALE .....Booth 717

Farmingdale Mfg. Co.
Potter St., Farmingdale, N. Y.

FARVAL .....Booth 298

The Farval Corp.
3249 E. 80th St., Cleveland 4, Ohio
(See *EATON*)

FAWCETT & PRESTON .....Booth 1531

Fawcett & Preston Co., Ltd.
Bromborough, Cheshire, England
(See *INTERNATIONAL SALES MANAGEMENT*)

FIFE .....Booth 655

Fife Mfg. Co.
Box 9185, Oklahoma City 18, Oklahoma
EXHIBITING: Components of the complete line of automatic cloth guiding equipment, including various automatic guiding power units, sensing heads, and cloth guiding mechanisms; an actual demonstration of guiding cloth by shifting the let-off roll; the Kamberoller method of guiding cloth at an intermediate location.
PERSONNEL IN BOOTH:
I. L. Fife, pres.
D. G. Fife, vice-pres. sales
R. L. Fife
D. Paulsen
N. Lippucci
W. A. Schilling
F. C. Ames
J. F. Slaughter
C. W. Brown
B. A. Feiertag
RESIDING AT: Shelburne Hotel

FLEISSNER & SOHN .....Booths 99, 482

Fleissner & Sohn
Egelsbach-Frankfurt/Main, Germany
(See *SACO-LOWELL*)

FLETCHER .....Booth 547

The Fletcher Works, Inc.
Glenwood Ave. & Second St., Philadelphia 40, Pa.
EXHIBITING: Six 1960 models of Fletcher machines—A 5-foot "Power-Fab" high speed, automatic loom, designed to produce heavy government webbings; a 9-foot "Multi-Fab" automatic narrow fabric loom which operates at 300 ppm; a "Duplex" twister equipped with 5" rings; a "Jumbo Duplex" twister with 6" rings featuring production of a 5-lb package; "Speedex" redraw winder; and high speed skein reels.

FORTE .....Booth 37

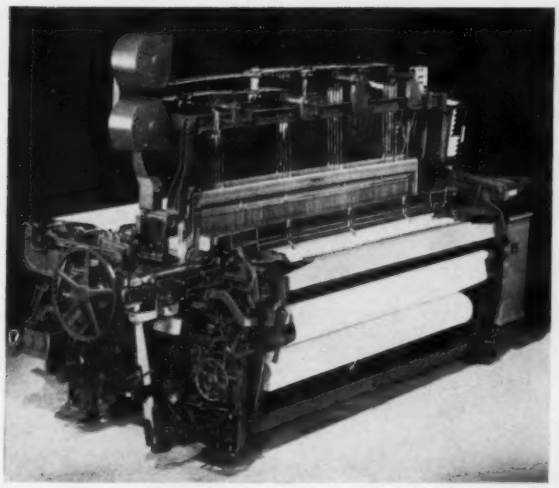
Forte Engineering Co.
59 Davis Ave., Norwood, Mass.
EXHIBITING FIRST TIME: The entire line of electronic moisture content analyzers for determining the moisture content of natural and synthetic fibers in bulk form as well as in tops and yarn in skeins and on cones.
PERSONNEL IN BOOTH:
S. Breen — W. Benson
H. R. Zayotti

FOSTER .....Booth 649

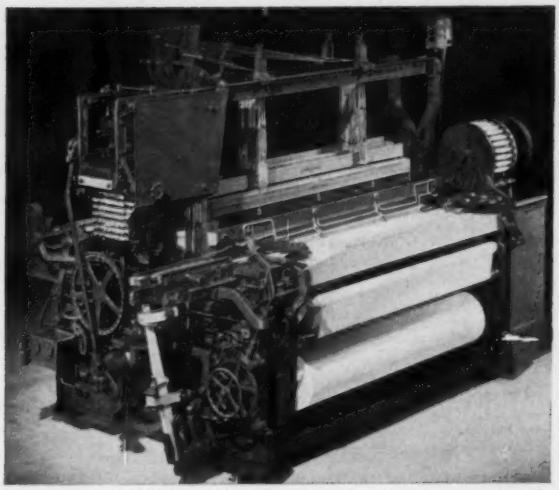
Foster Machine Co.
Westfield, Mass.
EXHIBITING FIRST TIME: A new cone winder of advanced design and with many unique advantages; the Lindly Dyna-Micro-Gage, a photoelectric testing device for the continuous monitoring of spun and filament yarns, and for checking the average denier of filament yarns, the uniformity of spun yarn, and other operational elements.
ALSO SHOWING: The Lindly "Electrotense" yarn tensioning device; the Lindly Automatic Yarn Inspector.
PERSONNEL IN BOOTH:
E. C. Connor, pres. & dir. sales.
P. H. Farmer, asst. sales mgr.
E. P. Dodge, sou. mgr.
C. H. Amidon, ch. eng.
F. F. Stange, eng.
R. B. Kendall, eng.
S. A. Burke, eng.
E. Davis, eng.
J. A. Moore, eng.
J. B. Davenport, rep.
G. W. Mallory, rep.
H. E. Swift, rep.
C. A. Faunce, rep.
E. H. Ely, rep.
H. Lindemann, pres. Lindly Co.
V. Mateyka, vice-pres.
C. P. Elgin, eng.

FOXBORO .....Booth 399

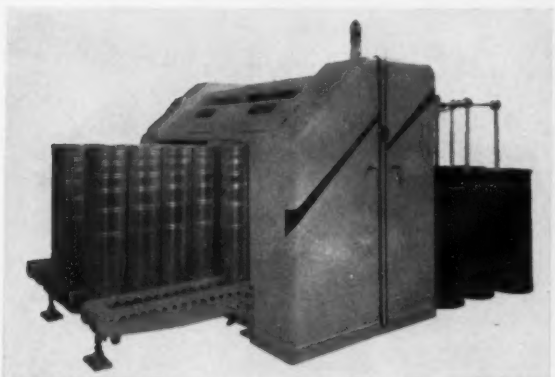
The Foxboro Co.
Foxboro, Mass.
EXHIBITING FIRST TIME: The Model



The new Draper Model HB loom which is designed primarily for weaving heavy suitings. This 72" machine equipped with an automatic filling magazine will be shown operating at 166 ppm. (E-333)

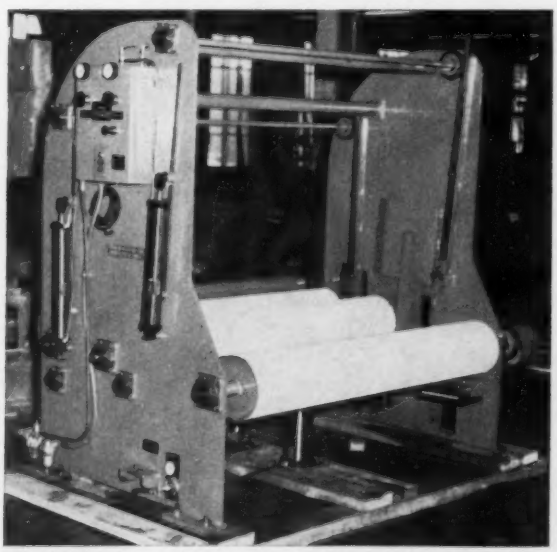


The new Draper Model X-3 loom for weaving all fabrics normally made on the X-2 and many synthetics commonly woven on the XD. At the show a 50" model will be weaving dress goods. (E-334)

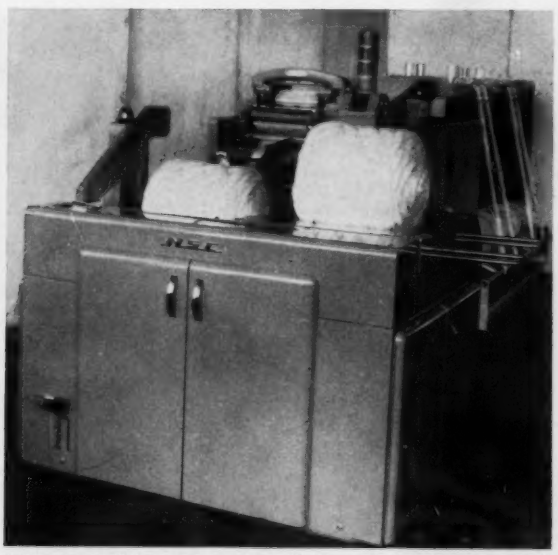


The new O-M cotton system, high speed drawing frame has a new type of automatic can changing mechanism. See it operating in the Edward S. Rudnick, Representatives, booth. (E-335)

Side view of a card equipped with the Daiwa attachment which is said to provide increase of carding rate and effectiveness. It also will be on display in the Rudnick booth. (E-336)



The Model 7 three-roll automatic pneumatic cut-off winder to be on display in the Birch Brothers booth. (E-381)



Schlumberger finisher intersecting gill, Type GNIB-RE, equipped with draft regulator. Delivery speeds range from 65 to 110 ypm. (E-382)

C-HCR CycleLog Controller for dyeing operations which automatically controls rate of temperature rise, dyeing temperature, holding time, rate of cooling, rinse temperature, and rinse time; the pH Dynalog Recorder which measures pH without the traditional amplifier; a 160 sq in diaphragm motor for pneumatic loading of squeeze rolls; a laboratory recorder which provides on a single chart records of temperature and dew point.

ALSO SHOWING: Complete instrumentation for automatic chemical dilution; stretch recording and control equipment.

PERSONNEL IN BOOTH:

T. A. Jones	R. E. Beers
E. R. Timms	C. L. Williams
A. S. Warren	K. L. Barton, Jr.
W. Bishop	W. D. Carty
G. E. Clark	J. S. Coulter
J. R. Hileman	R. M. Glass
B. S. Winchester, Jr.	W. H. Ridley
A. R. Hicks	A. Grant
C. W. Hartman	

FRANKL ..... **Booth 1324**

Ernest L. Frankl Associates
515 Madison Ave., New York 22, N. Y.

EXHIBITING: Equipment of the following manufacturers (for details refer to the respective builders of the machines): Sant' Andrea Novara — preparatory, spinning, and twisting equipment for worsted system mills; Svetema — dyeing, bleaching, and washing machinery; Jakob Jaeggli & Cie. — hydraulic beam jacks and mercerizing machines; Jakob Mueller — narrow fabric looms (shuttle and shuttleless types); Tattersall & Holdsworth's — tensionless cylinder dryers and dyeing machines; Mezzera, S.p.A. —dyeing and washing machines; Trutzschler & Co. — cotton opening machinery and accessories.

PERSONNEL IN BOOTH:
E. L. Frankl G. Frankl

G P E CONTROLS ..... **Booth 750**

G P E Controls, Inc.
240 E. Ontario St., Chicago 11, Ill.

EXHIBITING: Width indication equipment for moving webs which provides continuous indication or recording of width of textiles, etc., including the Model 525-AL1-PJ Regulator, the RB-701 Guide Roll, the Rotojet Regulator, and a reflected light photocell sensing head; a payoff (unwind) reel edge guide demonstration utilizing the Model 558-AL1 Regulator, the RB-696 miniature sensing nozzle, and a 2" x 6" pivot mounted cylinder; a line follower control display featuring the Model 558-AL1-PJ edge guide regulator; the RD-736 sensing nozzle; the new Centerline sensing nozzle with 6" orifice; the RB-770 air beam nozzle; the RB-767 Proximatic nozzle.

PERSONNEL IN BOOTH:
E. Schroeder
J. Deering
P. Sorsen
D. B. Digel

RESIDING AT: Shelburne Hotel

GABB ..... **Booth 710**

Gabb Special Products, Inc.
Windsor Locks, Conn.

EXHIBITING FIRST TIME: "Shear-Flow" industrial mixers for preparation of clears, binders, print gums, vat gums, water-in-oil and oil-in-water emulsions, print paste, dyes, resin finishes, etc.

PERSONNEL IN BOOTH:
D. H. Thomson, pres.
N. F. Smith, vice-pres. & sales mgr.
R. E. Glaque, gen. mgr.

GASTON COUNTY ..... **Booth 638**

Gaston County Dyeing Machine Co.
Stanley, N. C.

EXHIBITING FIRST TIME: Wet finishing equipment.

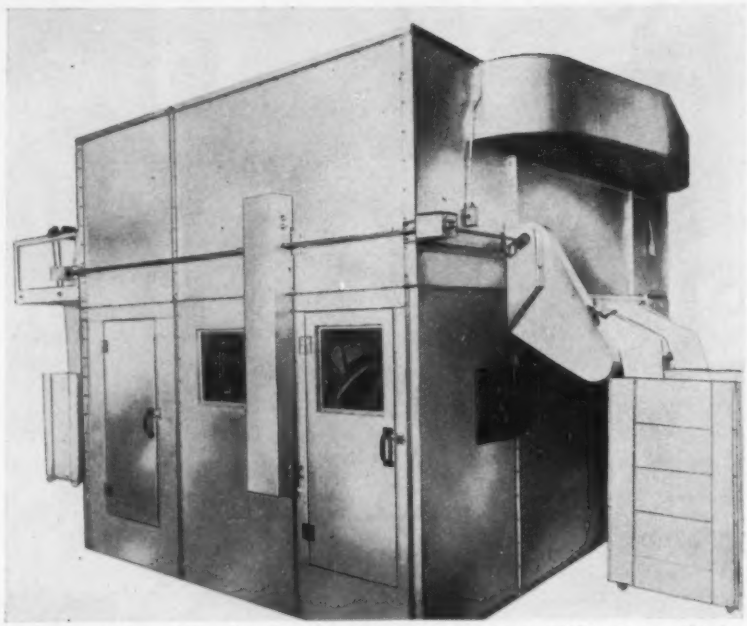
ALSO SHOWING: Laboratory equipment.

PERSONNEL IN BOOTH:
W. Newcomb, sales eng.
Gordon Hacker, gen. mgr.
George Hacker, sales mgr.
R. P. Craig, vice-pres.
A. P. March, sales eng.
J. R. Angel, sales eng.

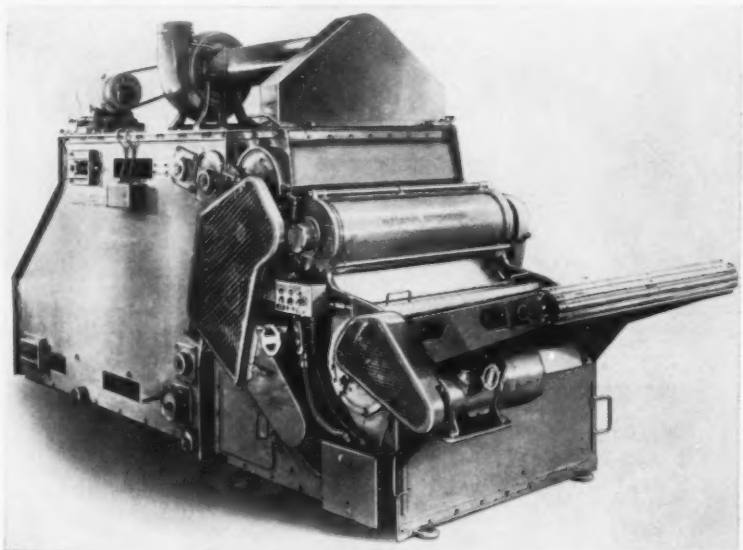
RESIDING AT: The Shelburne

GENERAL DISPERSIONS ..... **Booth 1216**

General Dispersions, Inc.
165 Third Ave. at E. 126th St., Paterson, N. J.
(See GENERAL PLASTICS)



A demonstration model of this "Reelax-Jet" dryer for slack drying of broad woven fabrics may be seen in the booth of Tubular Textile Machinery Co. (E-337)



Curlator will show the Model 40-B Rando-Feeder and Rando-Webber for high production of nonwoven fabrics and batting. (E-338)

GENERAL ELECTRIC ..... **Booth 410**

General Electric Co.
1 River Rd., Schenectady 5, N. Y.

EXHIBITING: Direct Cuttent Motor and Generator Dept.—the "Kinatrol" eddy-current coupling speed variator, a packaged all-electric drive for wet processing ranges, slashers, warpers, etc.; "Parmatic" adjustable-speed d-c drives; and "Kinamatic" speed variators. Gear Motor and Transmission Components Dept.—The "Polydyne" drive, a mechanical adjustable-speed drive that provides stepless adjustment of output speed from an a-c motor.

GENERAL PLASTICS ..... **Booth 1216**

General Plastics Corp.
165 Third Ave. at E. 26th St., Paterson, N. J.

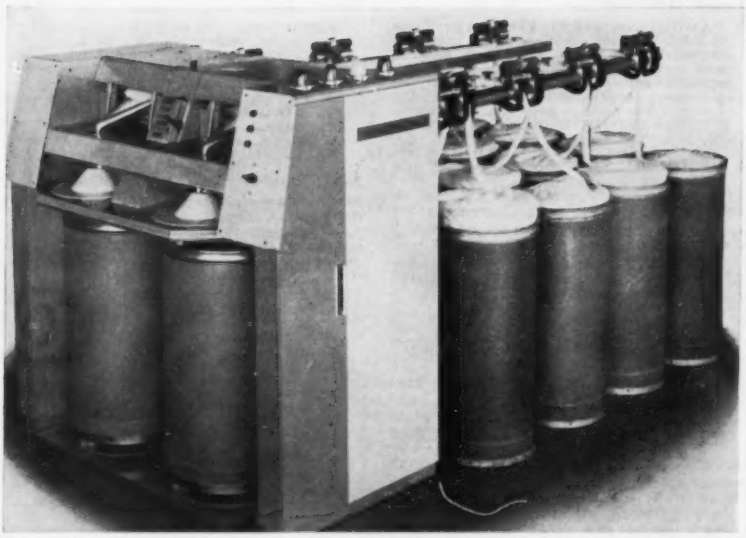
EXHIBITING FIRST TIME: Fabrics finished with nylon dispersions and bulletins outlining the advantages of these materials over resin formulations; a quick-drying compound which may be sprayed onto fabrics to eliminate problems of slippage and fraying in cutting and sewing operations and to insure longer life of garments as the product withstands washing and dry cleaning.

ALSO SHOWING: "Teflon"-coated dry cans and other textile processing equipment which benefits from a coating that prevents the sticking and buildup of resins, starches, sizings, dyes, etc.

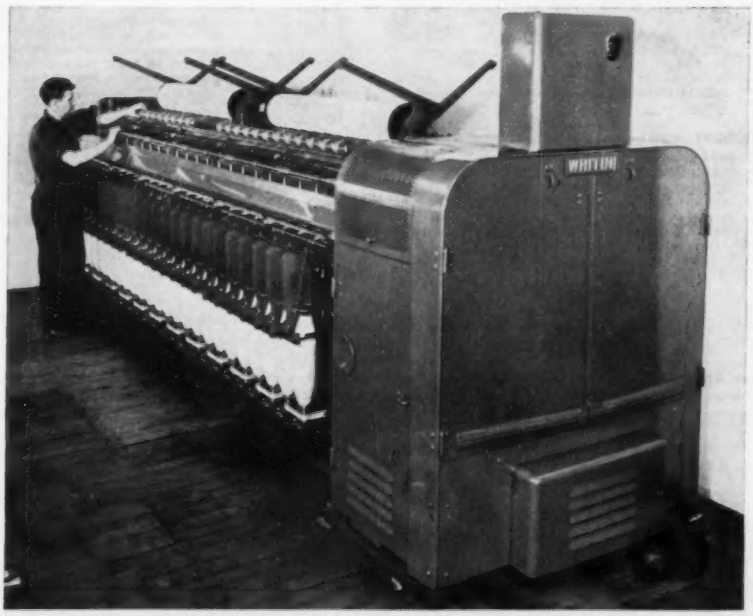
GENERAL RADIO ..... **Booth 710A**

General Radio Co.
West Concord, Mass.

EXHIBITING FIRST TIME: The type 1531-A "Strobotac" which offers sev-



This two-head, high speed drawing frame for cotton system mills will be the highlight of the SACM (Societé Alsacienne de Constructions Mecaniques) cotton exhibit—Booth 844. (E-339)



The new Whitin "Flex-Spin" wool spinning frame with up to 16" traverse, reciprocating ring and spindle rail, single balloon control ring, and optional variable speed drive. (E-340)

eral advantages over previous models, including stopping faster motion and a new "Flip-Tilt" carrying case and arrangement of lamp housing that makes instrument much easier to use.
PERSONNEL IN BOOTH:
W. R. Thurston, mkt. res.
M. J. Fitzmorris, eng.
R. E. Wilson, ser. eng.

GESSNER ..... **Booth 246**

David Gessner Co.
41 Fremont St., Worcester 3, Mass.

EXHIBITING FIRST TIME: A shearing machine offering advantages of higher production and better quality.
ALSO SHOWING: A 30-roll "Hi-Torc" napper.
PERSONNEL IN BOOTH:
J. P. Franklin, pres.
T. A. Dourdeville, vice-pres.

David Gessner continued

R. C. Franklin, sales mgr.
R. A. Herard, sou. sales rep.
RESIDING AT: Hotel Dennis

GILBOS ..... **Booth 854**

Ateliers de Construction Gilbos
Hendersem-Alost, Belgium

U. S. AGENT: Stellamcor, Inc., 10 E. 43rd St., New York 17, N. Y.

EXHIBITING FIRST TIME: The "Type 10 Rolls" winding machine which produces cross-wound packages up to 11" in diameter at speeds up to 825 rpm; the "U. C." cross winder for winding from skeins onto cones at speeds of 110 to 525 ypm.
PERSONNEL IN BOOTH: Mr. and Mrs. Gilbos

GOULSTON ..... **Booth 642**

George A. Goulston Co.
80 Federal St., Boston, Mass.

EXHIBITING FIRST TIME: "Solube R," A newly developed lubricant for the carpet industry.
ALSO SHOWING: "Olive Sub," "Topsol," and "Static Nil" fiber lubricants.
PERSONNEL IN BOOTH:
G. A. Goulston, pres.-treas.
B. Goulston, asst. treas.
A. Goulston
H. Miller
A. Winograd
RESIDING AT: Empress Motel

GRINNELL ..... **Booth 51**

Grinnell Corp.
260 W. Exchange St., Providence, R. I.

HALTON ..... **Booth 711**

Thomas Halton's Sons
"C" & Clearfield Sts., Philadelphia 34, Pa.

EXHIBITING FIRST TIME: 1304 double-lift, double-cylinder, independent cylinder motion Jacquard machine; double-lift, single-cylinder, chain drive Jacquard machine.
PERSONNEL IN BOOTH:
M. Halton, partner
T. C. Halton, partner
F. C. Shannon, Jr., salesman
F. J. Shannon, Sr., salesman
RESIDING AT: Traymore Hotel

HANSEATISCHE ..... **Booth 1032**

Hanseatische Motoren-Gesellschaft m. b. H.
Hamburg-Bergedorf, Weidenbaumsweg 139, Germany
(See *TEXPLANT*)

HARNISCH ..... **Booth 663**

Harnisch Fabrik fur Textilbedarf Kirchheim-Teck West Germany
(See *LENKOTEX*)

HAYES ..... **Booth 413**

Hayes Industries, Inc.
437 Fern Ave., Jackson, Mich.

EXHIBITING FIRST TIME: A 30" forged head tricot beam for nylon.
ALSO SHOWING: 21" forged head tricot beam; 32" section beam for nylon; 38" section beam for cotton.
PERSONNEL IN BOOTH:
R. D. Richards, sales mgr.
G. Barrie, gen. sales mgr.
W. D. Sharp, tex. eng.
J. P. Laird, sales rep.
D. R. Sellars, sales rep.
RESIDING AT: Hotel Claridge

HAYSSEN ..... **Booth 474**

Hayssen Mfg. Co.
1305 St. Clair Ave., Sheboygan, Wis.

HEANY ..... **Booth 7**

Heany Industrial Ceramic Corp.
P. O. Box 530, New Haven, Conn.

EXHIBITING: "Heanium" thread guides and tension devices.
PERSONNEL IN BOOTH:
A. O. Pieper, pres.
R. L. Carroll, rep.
R. P. Bennett, rep.
H. Beveri, prod. mgr.

HENGSTLER ..... **Booth 929**

J. Hengstler KG.
Aldingen Kreis Tuttlingen, Germany

EXHIBITING FIRST TIME: Predetermining yardage counter for looms; predetermining yarn length counters; electromagnetic counters for indicating production of a number of looms on a central panel for easy control of production.
PERSONNEL IN BOOTH:
Dr. Mueller, sales mgr.

HENRIKSEN ..... **Booth 1227**

Vald. Henriksen I/S
Soeborg (Copenhagen), Denmark
(See *EDDA*)

HERGERT ..... **Booth 1318**

Heinz Hergert Maschinen-und Spezial-Apparatebau
Frankfurt/M (14), Germany
(See *WOOLART*)

HERR ..... **Booth 69**

Herr Mfg. Co., Inc.
318 Franklin St., Buffalo 2, N. Y.

EXHIBITING FIRST TIME: The latest Type M conical ring and holder featuring "seam lubrication" for both manual and automatic lubrication.
ALSO SHOWING: Complete line of

WHAT YOU'LL SEE IN ATLANTIC CITY

flyers for uptwisters to accommodate all types of yarn.
PERSONNEL IN BOOTH:
H. B. Atwood, pres.
R. M. Leach, tech. eng.
W. W. Woodard, tech. eng.
J. McLean, eng.
W. K. Anderson, Jr., salesman

HERZOG ..... **Booth 950**

August Herzog Maschinenfabrik (Herzog-Auerbach & Co.)
Postfach 445, Oldenburg, Western Germany
(See *VANDERBURGH*)

HOBBS ..... **Booth 552**

Hobbs Mfg. Co.
26 Salisbury St., Worcester 5, Mass.

HOBOURN ..... **Booth 124**

Hobourn Aero Components Ltd.
Strood, Rochester/Kent, England
(See *DEERING MILLIKEN*)

HOLDSWORTH ..... **Booth 171**

Holdsworth Mfg. Co., Inc.
55 Sabin St., Pawtucket, R. I.

EXHIBITING: The latest design "High Speed Super Gill" for use in the processing of worsted or worsted type synthetic yarns, in dyehouses and in preparatory positions prior to combing, and in finisher positions after combing; latest design "High Speed Super Gill" with automatic ball doffing unit installed; latest design "High Speed Super Gill" with "Auto-Leveller" device which automatically reduces any irregularities of feed weight and provides for delivery of a constant level sliver at high rate of production.
PERSONNEL IN BOOTH:
J. L. Coon
C. F. Curran, Jr.
W. E. Stearns
H. Kazarian,
A. W. Hayden
D. D. MacDonald
W. P. Rutley
E. Bramhall

HOOD ..... **Booth 350**

R. H. Hood Co.
19th & Westmoreland Sts., Philadelphia 40, Pa.

EXHIBITING FIRST TIME: The "Hood Open Doubler," an open (no fallers or pins) draw frame specifically designed for the first operation following the Perlok process of tow-to-top conversion.
ALSO SHOWING: Combing equipment, accessories, and supplies.
PERSONNEL IN BOOTH:
H. G. Hood, pres.-treas.
R. G. Hood II, sec.
W. F. Gill, sales
W. F. Christensen
RESIDING AT: 231 North Point Rd., Ocean City, N. J.

HOUGET ..... **Booth 857**

Ateliers Houget
2 rue Fernand Houget, Verviers, Belgium

Houget continued

EXHIBITING FIRST TIME: The Type R.T.F.I. woolen system ring spinning frame which spins with less tension and provides advantages of higher spindle speeds, fewer ends down, 40 per cent larger package, yarn quality comparable to that produced on mules.
PERSONNEL IN BOOTH:
Mr. Van Ditshuizen
Mr. Vervenne
RESIDING AT: The Lafayette and Traymore Hotels

HOWARD BROS. ..... **Booth 379**

Howard Bros. Mfg. Co.
44-46 Vine St., Worcester 8, Mass.

EXHIBITING: Sample blender; napper clothing; clearer brushes; hand stripping cards; card clothing; fancies.
PERSONNEL IN BOOTH:
H. C. Coley, chairman & treas.
N. Mitchell, pres. & sec.
C. A. Haynes, vice-pres. & works mgr.
W. Butterworth, sales
A. Govin, sales
Hugh Miller, sales
D. Spencer, sales
H. Suggs, sales
RESIDING AT: LaConcha Hotel

HUDSON ..... **Booth 41**

Hudson Automatic Machine & Tool Co.
137-139 38th St., Union City, N. J.

EXHIBITING FIRST TIME: A "Polaroid" photo attachment mounted on a "Projectina" Model 4014 microscopic projector for instantaneous recording of test data on fabrics, yarns, and fibers.
ALSO SHOWING: The Model 4016 "Projectina," a double projector for checking two samples of fabrics, yarns, etc., side by side.
PERSONNEL IN BOOTH:
C. A. Hepp, pres.
H. Peter, vice-pres.
H. Koerner, sales dept.
RESIDING AT: Marlborough-Blenheim Hotel

RODNEY HUNT ..... **Booth 191**

Rodney Hunt Machine Co.
Mill St., Orange, Mass.

EXHIBITING FIRST TIME: A rapid bleaching range for continuous open-width bleaching; a spreader roll incorporating a new principle of operation; a padder incorporating a new roll and new pressure system for high extraction.

Rodney Hunt continued

PERSONNEL IN BOOTH:
J. Rembe, vice-pres. mkt.
M. G. Hopkins, mgr. mach.
H. L. Daub, asst. mgr. mach.
D. A. Kunlholm, mgr. rolls
R. Powers, asst. export mgr.
V. L. Wilkinson, sales
J. Hayes, sales
L. Hayes, sales
RESIDING AT: Claridge Hotel

JAMES HUNTER ..... **Booths 270, 272**

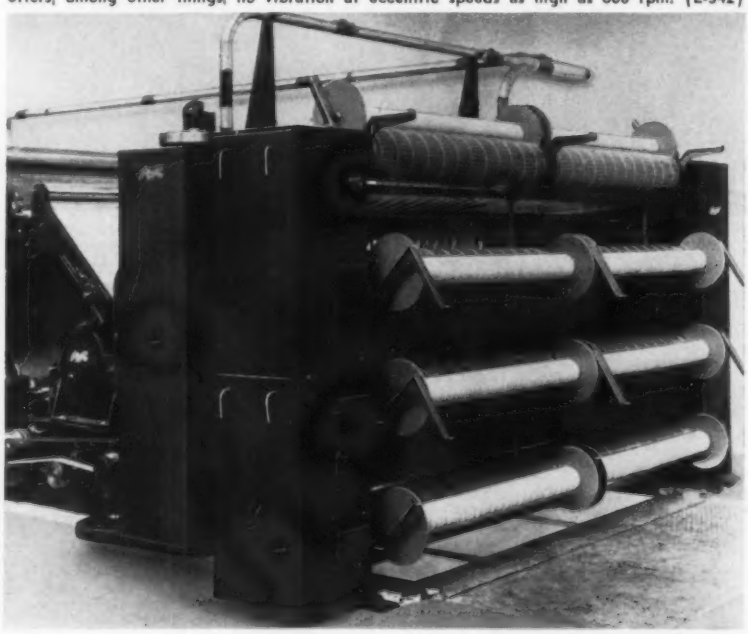
James Hunter Machine Co., Inc.
North Adams, Mass.

James Hunter, Inc.
Mauldin, S. C.

EXHIBITING FIRST TIME: A continuous high temperature wet processing machine featuring pressure seals which, when placed at entering and leaving ends of the machine, will permit continuous treatment of fabrics at temperatures well above 212 F; the "Thermotest Rhodiaceta" for the determination of heat effects on fabrics or effect of dyestuffs or finishes that have been applied to fabrics; the Model AN bale blender which automatically feeds small tufts of cotton or other fibers in sandwich form from every bale used in an entire laydown; the "Web Former," a machine for non-woven manufacturers which is designed to produce random web constructions at better than average rates of production.
ALSO SHOWING: The Model 480-AW Fiber Meter; the Model AHC Imperial card or garnett feed; a single-cylinder 30" x 60" single doffer garnett for garnetting virgin synthetic fibers to produce well opened stock for batt making equipment, without overworking the fibers; Model 7-A Huntermatic Cross Lapper, 67" x 60", with patented clutch reverse mechanism, which by eliminating one fold in web travel results in evener side-to-side weight of batt on floor apron; pneumatic compressor head with floor apron; wind-up device with aluminum drums to reduce weight; the Model 9 65" Hunter "Fiber/Locker" needle felting machine; psychrometer for continuous testing of moisture in moving webs; and "Whirlaway" expanders.
PERSONNEL IN BOOTH:
J. H. Hunter, pres.
R. H. Hunter, vice-pres.
W. A. Leineweber, vice-pres.
H. F. Creegan, sales mgr.
A. V. Moody, sales mgr.

The new simplified Neptel electronic yarn imperfection counter by Sheffield. (E-341)

In Booth 171 visitors to the show may see this Platt woolen card tape condenser which offers, among other things, no vibration at eccentric speeds as high as 600 rpm. (E-342)



James Hunter continued

R. L. Plumb, sales mgr.
V. Neese, sales rep.
W. B. Estes, ser. mgr.
RESIDING AT: Diplomat Motel

HYATT BEARINGS ..... **Booth 275**
Hyatt Bearings Div., General Motors Corp.
Harrison, N. J.

EXHIBITING: Complete line of anti-friction bearings for looms, cards, drawing frames, spinning and twisting frames, and finishing machinery.
PERSONNEL IN BOOTH:
J. R. Gilmartin, gen. sales mgr.
E. P. O'Neill, sales mgr.
G. B. Baxley, sales eng.
T. E. Hustead, ch. eng.
E. Maurushat, div. eng.
M. E. Otterbein, asst. ch. eng.
C. C. Wardell, adv. mgr.
RESIDING AT: The Shelburne

INDUSTRIAL DRYER ..... **Booth 680**
The Industrial Dryer Corp.
432 Fairfield Ave., Stamford, Conn.

EXHIBITING: A fully automatic "H-W" Yarn Conditioner, arranged to automatically preheat, condition, and exhaust or dry all kinds of yarns.
PERSONNEL IN BOOTH:
P. H. Friend, rep.
R. G. Leininger, rep.
J. R. Tutt, rep.
F. W. Caesar, sales mgr.

INDUSTRIAS TEXTILES **415**
"Industrias Textiles"
Vallarta 21, Mexico 4, D. F.
(See TEXTILE INDUSTRIES)

INTERNATIONAL SALES MANAGEMENT ..... **Booth 1531**
International Sales Management Co.
123 N. Poplar St., Charlotte 2, N. C.

EXHIBITING FIRST TIME: Working model of fully automatic baling press (manufactured by Fawcett Preston & Co., Ltd., Bromborough, England) for baling synthetic or natural fibers.
PERSONNEL IN BOOTH:
P. R. Petersen, gen. mgr.
RESIDING AT: Marlborough-Blenheim

INTERSTATE ..... **Booth 1535**
Interstate Textile Equipment Co., Inc.
508 W. Fifth St., Charlotte, N. C.

Interstate continued

EXHIBITING FIRST TIME: The Delerue "Rocket" winder which winds coreless packages up to 30" long that contain as much as 9 lb of yarn.
PERSONNEL IN BOOTH:
M. Speizman, pres.
M. P. DeLeo, vice-pres.
L. Kimmel, sales mgr.
RESIDING AT: The Ritz-Carlton

JAEGGLI ..... **Booth 1411**
Jakob Jaeggli & Cie.
Winterthur, Switzerland
U. S. AGENTS: Ernest L. Frankl Associates, 515 Madison Ave., New York 22, N. Y.

EXHIBITING: Hydraulic beam jacks for loom beams, dye beams, and warp beams for knitting machines; models, blueprints, and illustrations of skein mercerizing machines for 54" and 90" skeins and complete installations, including the Coloras 16 neutralizing machine.

JOHNSON CORP. ..... **Booth 393**
The Johnson Corp.
805 Wood St., Three Rivers, Mich.

EXHIBITING: A complete line of Type "S" self-supporting rotary pressure joints with assembly plates and siphon elbows, used on dry cans, slasher cylinders, etc.; complete line of Type "L-JSP" (rod-supported) rotary pressure joints with assembly plates and siphon elbows; small operating models on which will be installed Type "SBP" self-supporting and Type "L-JSP" (rod-supported) rotary pressure joints with assembly plates and syphon elbows; solenoid operated valves for automatic or remote control of flow of liquids and steam up to 400 F; an instant copper tube steam water heater; compressed air separators and aftercoolers.
PERSONNEL IN BOOTH:
W. R. Monroe, pres.
T. O. Monroe, vice-pres.
J. E. Dal Ponte, reg. sales mgr.
R. W. Gotschall, vice-pres. sales
RESIDING AT: Colony Motel

JOHNSON SERVICE ..... **Booth 88**
Johnson Service Co.
507 E. Michigan Ave., Milwaukee, Wis.

JOMAC ..... **Booth 43**
Jomac, Inc.
6128 N. Woodstock St., Philadelphia 38, Pa.

Jomac continued

EXHIBITING: Rubber rolls for the textile industry.
PERSONNEL IN BOOTH:
H. E. Eldridge, vice-pres. sales
J. Evo, dist. mgr.
J. Seeburger, asst. to vice-pres.
R. Hughes, sales
Eric Engdahl, sales
C. Gibb, sales
RESIDING AT: Hotel Dennis

JOURNAL OF COMMERCE ..... **Booth 807**
"Journal of Commerce"
80 Varick St., New York, N. Y.

JUNGFRAU ..... **Booth 1208**
Jungfrau, Inc.
145 E. 57th St., New York, N. Y.

EXHIBITING FIRST TIME: Literature on the Buser automatic screen printing machine and Luescher Bros. screen making equipment.
PERSONNEL IN BOOTH:
C. D. Hardy, pres.

JURGENS ..... **Booth 820**
Albert Jurgens
Lonsstrasse 15, Emsdetten (Westf.), Western Germany

EXHIBITING FIRST TIME: "Ruthardt-Super" looms for production of backings for tufted carpets, canvas and duck, and carpets of jute, sisal, etc.
PERSONNEL IN BOOTH:
A. Jurgens, Jr., gen. mgr.
C. Armstrong, U. S. rep.

KANEGAFUCHI ..... **Booth 1148**
Kanegafuchi Machine Co.
Osaka, Japan
(See *RUDNICK*)

KEARNY ..... **Booth 342**
Kearny Mfg. Co., Inc.
Kearny, N. J.

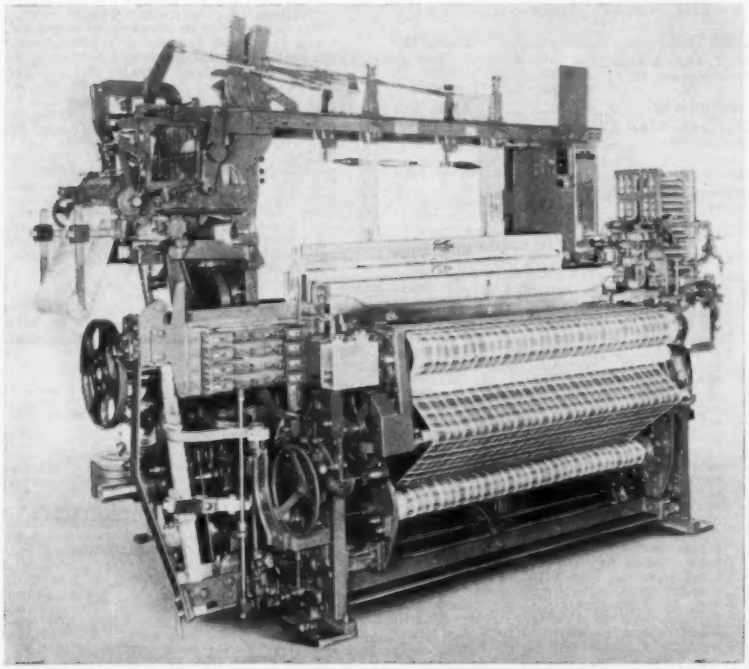
KENNETT ..... **Booth 11A**
Kennett Equipment & Machinery Co.
Div. F. F. Slocomb Corp.
S. Union & P.R.R., Kennett Square, Pa.

EXHIBITING: Material handling equipment.
PERSONNEL IN BOOTH:
J. T. Ferri, pres.
M. C. Seldomridge, vice-pres.
J. F. Hearn, plant mgr.
O. B. Morman, sales mgr.
J. Geuther, sales

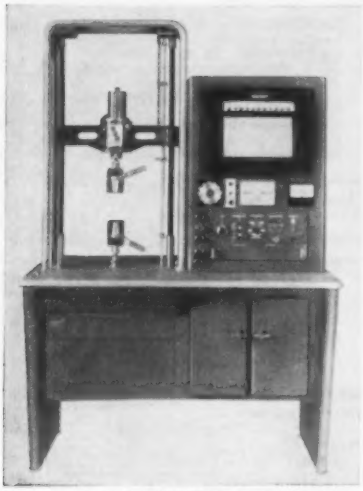
KENYON ..... **Booth 79**
William Kenyon & Sons, Inc.
Paterson & 2nd Streets, Perth Amboy, N. J.

EXHIBITING FIRST TIME: An individual drive for cotton cards featuring compactness, positive transmission of power by long-life belt that will not stretch, and no maintenance except

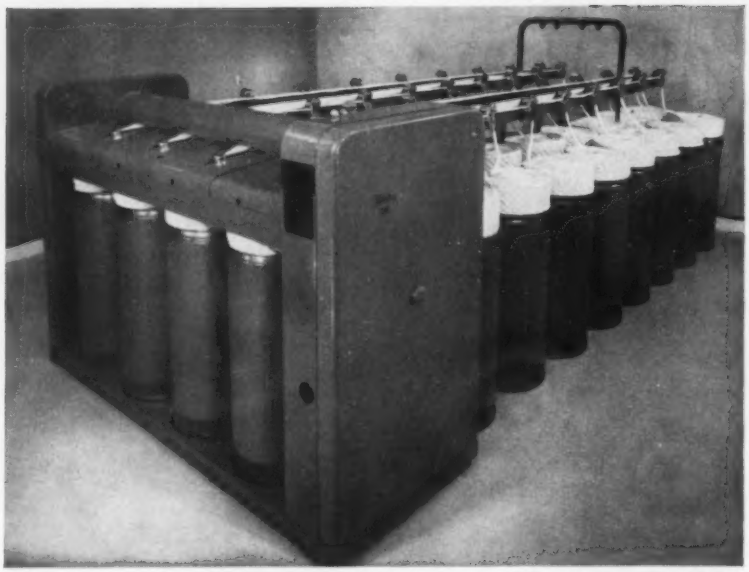
Two of these Model C-7 automatic bobbin changing dobby looms will be operating in the Crompton & Knowles exhibit. One will be weaving terry and the other fine filament dress goods. (E-343)



One floor maintenance machine to be featured by Tennant is this Model 40-E battery-powered walk-behind sweeper. (E-344)



The new Scott Model CRE constant-rate-of-extension tester is available with pushbutton controls for easier operation. (E-345)



Sliver delivery rates ranging from 264 to 590 fpm are claimed for this Rieter Model DO drawing frame which may be seen in Booth 19. (E-346)

annual greasing.
ALSO SHOWING: The "Kenbrake," a combined clutch and brake for spindles on frames with 4-spindle tape drive; "Kennylbond" bonded nylon tape for driving spindles; and "Kenyon" tape bonding machines.
PERSONNEL IN BOOTH:
O. E. Butcher, treas. & gen. mgr.
C. Kowtna G. A. Clark
RESIDING AT: Saxony Motel

KETTLING & BRAUN ..... **Booth 836**
Kettling & Braun, Alleinhersteller Fr. Drabert Sohne
Minden Westf., Western Germany
(See *COSA*)

KIDDE ..... **Booth 478**
Kidde Textile Machinery Corp.
35 Farrand St., Bloomfield, N. J.
EXHIBITING: Model 144B tricot type warper for 21" x 21" spools; Model 149C tricot type interchangeable warper for 32" dia. by 42" and 50" spools; Model 146B yarn storage accumulator; Model 158A heavy duty beamer for 36" x 54¼" beams; 60-end demonstration unit of a warping creel.
PERSONNEL IN BOOTH:
W. J. Behr, pres.
H. W. Ruddick, vice-pres.
J. H. Fleming, sales eng.
E. L. Herbert, sales eng.
D. W. McCoy, sales eng.
A. W. Post, sales eng.
RESIDING AT: Chalfonte-Haddon Hall

KIRKMAN & DIXON ..... **Booth 277**
Kirkman & Dixon Machinery Co.
Greenwood, S. C.

KLAUDER WELDON GILES **707**
Klauder Weldon Giles Machine Co.
Adams Ave. & Leiper St., Philadelphia, 24, Pa.

KLUTTZ ..... **Booth 754**
Kluttz Rings, Inc.
623 E. Franklin Ave., Gastonia, N. C.
EXHIBITING FIRST TIME: "Lubricased" spinning rings, featuring a dry lubricant impregnated into the pores of the steel to provide faster starting and longer traveler and ring life; a mechanical wear testing machine showing advantages of the ring.
PERSONNEL IN BOOTH:
J. H. Foard, pres.
W. P. Taylor, sales eng.
H. K. Smith, sales rep.
T. H. Watson, sales eng.
W. A. Kluttz, vice-pres.
D. Yoder, dev. eng.
RESIDING AT: Hotel Shelburne

KNOTEX ..... **Booth 900**
"Knotex"-Maschinenbau, G.m.b.H.
Frohsinnstrasse 27, Augsburg, Germany
EXHIBITING FIRST TIME: The universal warp tying machine, Model "Knotex," for tying warps at the loom, in the loom, and on stationary frame.

Knotex continued

PERSONNEL IN BOOTH:
H. Kraus, sales eng.
RESIDING AT: Hotel Colton Manor

KUSTERS ..... **Booth 846**
Textilmaschinen Eduard Kusters
457 Gladbacher Strasse, Krefeld, Germany
EXHIBITING FIRST TIME: The "Aquaroll" water mangle, Type 75, with a water pressure system which allows for uniform nip pressure; the "Vibrotex" continuous backgrey washing machine, Type 78.
PERSONNEL IN BOOTH:
E. Kusters, pres.
W. Laudenbach, gen. mgr.
E. J. Hannen, sales mgr.
H. Kutz, ser. eng.
RESIDING AT: Marlborough-Blenheim

LANE ..... **Booth 387**
W. T. Lane & Bros., Inc.
Poughkeepsie, N. Y.

LANSDOWNE ..... **Booth 715**
Lansdowne Steel & Iron Co.
Morton, Pa.

LEBOCEY ..... **Booth 1401**
Lebocey Needle Co.
Troyes, France
(See *ROTHKOPF*)

LEESONA ..... **Booth 197**
Leesona Corp.
P. O. Box 1605, Providence 1, R. I.
EXHIBITING: Unifil loom winders in operation on X2 and XD looms, demonstrating the weaving of cotton and synthetic fabrics with Unifil and featuring the device's adaptability to the double-change loom, the weaving of fabrics from "Saaba" textured yarns, and the versatility to be obtained with the device in allowing a mill to change from one style to another; "Twister-Coners" demonstrating the single step twisting and coning of 8-lb cones of filament and stretch yarn suitable for use as a supply to the Unifil loom winder or other processes; take-up machinery to demonstrate production of large precision-wound packages of filament yarn, taken up directly from a spinning process; the "Roto-Coner" drum winder with attachments for producing, at high speed, large cones that can be used as a supply to the Unifil; instruments to demonstrate the most modern methods of yarn testing during production.

Leesona continued

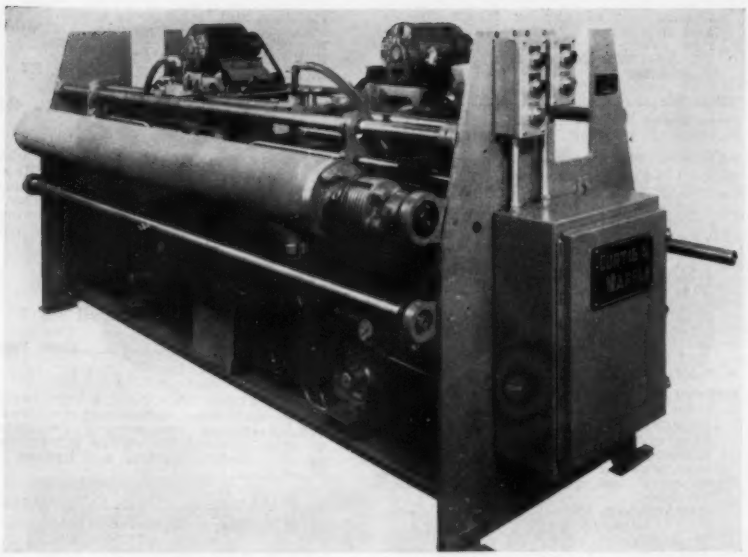
PERSONNEL IN BOOTH:

F. P. Barrie	R. H. Wallace
F. J. Barrows	J. V. Keith
J. Bowler	H. R. Kennedy
J. R. Breen	H. D. Kernan
J. A. Freed	R. Waugh
K. H. Gibson	A. D. Weston
W. V. Goodhue	J. J. White
R. Leeson	R. Aghion
G. Mitchell	F. Ernoult
E. C. Parish	L. Ffrench
R. S. Pennock	J. A. Nasmith
W. J. Quinn	R. P. Newell
C. E. Sullivan	H. Richardson

LENKOTEX ..... **Booth 663**
Lenkotex Co., Inc.
135 Liberty St., New York 6, N. Y.
EXHIBITING FIRST TIME: The "Touro-Strob" stroboscopic speed measuring and process observation instrument (manufactured by Mayer & Co. of Germany); plastic pickers for looms, manufactured by Harnisch of Germany; the Harnisch shuttle truing machine; and plastic pin strips to simplify repair of faller bars in worsted system drawing frames.
ALSO SHOWING: Roller bearing spindles for spinning and twisting, by Spintex of Germany; spinning and twisting rings by Mann of Germany; paper tubes for spinning and twisting and paper bobbins for roving frames, by Industrie Saccardo of Italy; temple rolls and rings for looms, by Harnisch.
PERSONNEL IN BOOTH:
V. Lindner, sec.

LESTERSHIRE ..... **Booth 1231**
Lestershire Spool Div. National Vulcanized Fibre Co.
Wilmington 99, Del.
(See *NATIONAL VULCANIZED FIBRE*)

LINCOLN ..... **Booth 307**
Lincoln Engineering Co.
4010 Goodfellow Ave., St. Louis, Mo.
EXHIBITING FIRST TIME: "Micro-Measure" miniaturized lubricant meter for automatic lubrication of spinning and twisting rings and machinery; "Flex-O-Matic" compressed air line accessories, including air couplers and nipples, hose fittings, lubricators, filters, and pressure regulators; air compressors for cleaning in the mill and for operation of air-powered equipment; "No-Air" Dyna-Spray systems for maintenance painting operations and for spraying various liquid products onto fabrics.
ALSO SHOWING: Manual and power-



Curtis & Marble will display the new Model SL selvage shear for efficient trimming of all fabrics, including those made on the Draper shuttleless loom. (E-347)

Highlight of the Hudson exhibit will be this microscopic projector with Polaroid camera attachment. (E-348)

operated lubrication equipment; manually-and power (air or electric)-operated centralized lubrication equipment installed on a Whitin head, Draper X2 loom, Saco-Lowell ring rail section.
PERSONNEL IN BOOTH:
R. E. Crean, ind. sales mgr.
J. B. Benskin, asst. ind. sales mgr.
R. G. Doss, div. mgr.
B. S. Davis, div. mgr.
W. Hough, rep.
W. Forrester, rep.
V. Romero, export mgr.
RESIDING AT: Shelburne Hotel

LINDLY ..... **Booth 649**

Lindly & Co., Inc.
248 Herricks Rd., Mineola, L. I., N. Y.
(See *FOSTER*)

LINK-BELT ..... **Booth 94**

Link-Belt Co.
Prudential Plaza, Chicago 1, Ill.
EXHIBITING FIRST TIME: The RS P.I.V. variable speed drive designed with ratings up to 50 hp; the Motorized Differential P.I.V. with automatic controls.
ALSO SHOWING: Enclosed gear drives for finishing equipment and spinning and twisting frames, including the Universal worm gear, shaft-mounted, in-line helical, and Motogear speed reducers; self-aligning bearing line, including spherical roller bearings, ball bearings, pillow blocks, flange units, and special units for the textile industry; typical silent and roller chain drives.

LIVERMORE ..... **Booth 322**

H. F. Livermore Corp.
20 Linden St., Allston, Mass.

LOCKWOOD GREENE ..... **Booth 86**

Lockwood Greene Engineers, Inc.
41 E. 42nd St., New York 17, N. Y.

MAAG ..... **Booth 714**

Gebr. Maag Maschinenfabrik AG
Kusnacht/ZH, Switzerland
(See *TRUMETER*)

MACBETH ..... **Booth 389**

Macbeth Daylighting Corp.
P. O. Box 950, Newburgh, N. Y.
EXHIBITING: "Skylight" and "Examolite" fixtures for critical color matching, shading, flaw detection, and perching.
PERSONNEL IN BOOTH:
R. E. Meeker, gen. sales mgr.
N. Macbeth, pres.
A. Moore, sales eng.

MACHINECRAFT ..... **Booth 118**

Machinecraft, Inc.
Whitman, Mass.
(See *COTTON-McCAULEY*)

MAIN ..... **Booth 679**

Robert A. Main & Sons, Inc.
465 W. Main St., Wyckoff, N. J.
EXHIBITING FIRST TIME: Composition slat conveyor apron specially designed for wet wool scouring operations; forged apron chain.
PERSONNEL IN BOOTH:
R. A. Main, pres.
C. A. Brautigam, vice-pres.

MANN ..... **Booth 663**

Chr. Mann Maschinenfabrik
Waldshut/Baden, Germany
(See *LENKOTEX*)

MARLIN-ROCKWELL ..... **Booth 606**

Marlin-Rockwell Corp.
402 Chandler St., Jamestown, N. Y.
EXHIBITING FIRST TIME: A high speed stretch yarn spindle bearing which provides smooth running, economical operation.
ALSO SHOWING: A complete line of ball bearings and units, including: pillow blocks, flange units, integral shaft bearings, sealed bearings of various types, torque tube bearings, cartridge width type bearings, double-row bearings, and stainless steel bearings.
PERSONNEL IN BOOTH:
R. F. Samuelson, ch. eng.
W. E. Broadhead, tex. eng.
M. T. Denslow, dist. sales mgr.
A. F. Turco, sales eng.
S. Skidmore, sales eng.
J. H. Pitman, sales eng.
J. A. Plungis, sales eng.
W. B. Layman, sales eng.
RESIDING AT: Claridge Hotel

MARSHALL & WILLIAMS ..... **Booth 559**

Marshall & Williams Corp.
46 Baker St., Providence, R. I.
EXHIBITING FIRST TIME: A heavy duty tenter frame.
ALSO SHOWING: The smallest (or lightest) frame built by the company; a complete line of tenter frame drive units (5 to 100 hp) all torqued for proper load demand; tenter clips.
PERSONNEL IN BOOTH:
J. C. Nash, pres.
F. H. Land, vice-pres.
J. A. Love, export rep.
A. J. Marshall, sales eng.
E. E. Ford, sales eng.
W. G. Brown, sales eng.
F. Hyatt, sales eng.
W. Tomlinson, designer

MATRIX ..... **Booth 294**

Matrix Controls Co., Inc.
189 S. Bridge St., Somerville, N. J.
EXHIBITING FIRST TIME: The "Margin Meter" for automatically indicating, recording, or controlling width of moving fabric as it emerges from a tenter, a dryer, or decater, or enters the final winding operation.
PERSONNEL IN BOOTH:
R. Schooley, pres.
I. Kovach, ch. eng.
H. Scully, sales

MAXBO ..... **Booth 1227**

AB Maxbo
Norrkoping, Sweden
(See *EDDA; SOUTHEASTERN LOOM*)

MAYER ..... **Booth 663**

Mayer & Cie. Maschinenfabrik
Tailfingen/Wurtt, Germany
(See *LENKOTEX*)

MCBRIDE ..... **Booth 1152**

Edward J. McBride Co., Inc.
Cottman & Wissinoming Sts., Philadelphia, Pa.
EXHIBITING: High speed magazine type warping creel section; carpet tufting and knitting creel.
PERSONNEL IN BOOTH:
E. J. McBride, pres.
W. F. Kraemer, sales eng.

MEDLEY ..... **Booths 940, 844**

Medley Mfg. Co.
Columbus, Ga.
(See *SACM*)

METTLER INSTRUMENT ..... **Booth 381**

Mettler Instrument Corp.
Princeton-Hightstown Rd., Hightstown, N. J.
EXHIBITING: The H23C10/13 yarn balance; the H3C1600 multi-purpose balance with grain calibration; H4 multi-purpose balance; K5T and K7T precision balances.
PERSONNEL IN BOOTH:
D. L. Jones, sales mgr.
E. G. Shull, sales rep.
N. L. Cooper, sales supv.
RESIDING AT: Claridge Hotel

METTLER'S SONS ..... **Booth 839**

Fr. Mettler's Sons Ltd.
Arth, Switzerland
(See *COSA*)

MEZZERA ..... **Booth 1412**

Mezzera S.p.A.
Via Frigia 19, Milano-Precotto, Italy
U. S. AGENT: Ernest L. Frankl Associates, 515 Madison Ave., New York 22, N. Y.
EXHIBITING: Automatic skein dyeing machine with four arms, completely enclosed; illustrations, descriptions, and catalogs of dye jigs, rope washing machines, etc.
PERSONNEL IN BOOTH:
Mr. Pinter, tech. dir.

WHAT YOU'LL SEE IN ATLANTIC CITY

MILL DEVICES ..... **Booth 39**

Mill Devices Co.
Div. of A. B. Carter, Inc.
Gastonia, N. C.
(See *CARTER*)

MILTON ..... **Booth 386**

Milton Machine Works, Inc.
Milton, Pa.

EXHIBITING: Warp beams for broad, narrow fabric, ribbon, velvet, and carpet looms; selvage spools; and special beams made of aluminum.
PERSONNEL IN BOOTH:
J. S. Billig, sales mgr.
J. B. McMurtrie, pres.
C. J. Anchor, ch. eng.
H. I. Schultz, Jr., sales eng.
RESIDING AT: Mt. Royal Motel

MINNEAPOLIS-HONEYWELL ..... **Booth 286**

Minneapolis-Honeywell Regulator Co.
Wayne & Windrim Avas., Philadelphia 44, Pa.

EXHIBITING FIRST TIME: A "Moist-O-Graph" system for measuring and controlling the moisture content of fabrics in continuous range processes; an "Electrik Tel-O-Set" system, a completely integrated system for electric process control; A "Versa-Tran" electronic liquid level controller; and the ADRT 3020 data handling system for use in logging data in various industrial processes.
ALSO SHOWING: A pneumatic "Tel-O-Set" system which can measure and control any process variable; a low range "Radiamatic" temperature detector for measuring the surface temperature of a moving object; and Series 800 diaphragm control valves.
PERSONNEL IN BOOTH:
R. D. Clarke, tex. sales mgr.
W. Munz
R. Fishburn
R. Jacobson
E. Klein, reg. ind. mgr.
J. Horner, br. ind. mgr.
RESIDING AT: Claridge Hotel

MITSUBISHI ..... **Booth 1034**

Mitsubishi International
120 Broadway, New York, N. Y.

MITSUI ..... **Booth 931**

Mitsui & Co.
530 Fifth Ave., New York, N. Y.
(See *RUDNICK*)

MODERN TEXTILES ..... **Booth 306**

"Modern Textiles Magazine"
303 Fifth Ave., New York, N. Y.

MORRISON ..... **Booth 507**

Morrison Machine Co.
1171-1225 Madison Ave., Paterson, N. J.

Morrison Textile Machinery Co.
Fort Lawn, S. C.

EXHIBITING FIRST TIME: A hydraulic calender.
ALSO SHOWING: A dye padder; standard finishing tenter; serpentine washer.
PERSONNEL IN BOOTH:
J. C. Morrison, pres.
J. Kreeft, ch. eng.
A. V. Caporossi, rep.
A. C. Freeman, rep.
RESIDING AT: Shelburne Hotel

MOUNT HOPE ..... **Booth 426**

Mount Hope Machinery Co.
15 Fifth St., Taunton, Mass.

EXHIBITING: The "Skew-Liner" for automatically solving skewed weft problems; an automatic tension control which is adaptable to all machinery for protecting fabrics where winding, unwinding, conveying, or similar operations are being carried out; "Free-Wheeling" expanders; floating roll guides; precision guiders; slack selvage eliminators and selvage uncurlers; web controllers; cloth opening equipment; cloth handling devices.
PERSONNEL IN BOOTH:
J. D. Robertson, pres.
J. Robertson, Jr.
W. Gallahue
S. Moffitt
Homi Kapadia, dir. o'seas mkt.

MUELLER ..... **Booth 1325**

Jakob Mueller
Frick, Switzerland

U. S. AGENT: Ernest L. Frankl Associates, 515 Madison Ave., New York 22, N. Y.

EXHIBITING: Models, catalogs, and illustrations of narrow fabric shuttle and shuttleless looms; samples of fabrics produced on these machines.
PERSONNEL IN BOOTH:
J. Mueller

MULLER ..... **Booth 1037**

Franz Muller Maschinenfabrik
M. Gladbach, Germany

NATIONAL DRYING ..... **Booth 74**

National Drying Machinery Co.
Hancock St. & Lehigh Ave., Philadelphia 33, Pa.

EXHIBITING FIRST TIME: Dryer components.
PERSONNEL IN BOOTH:
R. C. Parkes, pres.
D. A. Colker, vice-pres.
L. Hayes, rep.
J. Hayes, rep.
B. M. Jones, rep.
G. J. Schillinger, Jr. sales
J. J. Nihil, sales
H. Swanson, sales

NATIONAL RING TRAVELER ..... **Booth 89**

National Ring Traveler Co.
P. O. Box 1028, Pawtucket, R. I.

EXHIBITING: Ring travelers for spinning and twisting all types of natural and synthetic fibers, including the new crowned travelers for high speed spinning and special finish or plated travelers.
PERSONNEL IN BOOTH:
F. L. Chase, Jr., pres.-treas.
N. A. Jerome, supt.
J. T. Greenlaw, sales
L. E. Taylor, sou mgr.
T. H. Ballard, sales
F. S. Beacham, sales
C. L. Fitts, sales
H. B. Askew, agent
RESIDING AT: Hotel Claridge

NATIONAL STARCH ..... **Booth 713**

National Starch & Chemical Corp.
750 Third Ave., New York 17, N. Y.

EXHIBITING FIRST TIME: Two new cross-linking resins for use with wash-and-wear and non-woven fabrics—Resyn 78-3143 for finishing fabrics that require stiffness along with resistance to washing and dry-cleaning; Resyn 78-3147 for soft and very flexible finishes and for use as binder for printing on white or metallic pigments.
ALSO SHOWING: Kosol cold-water soluble starch for use as a hand building component for wash-and-wear finishes.
PERSONNEL IN BOOTH:
J. F. Fitzgerald
H. Olsen — D. Lassiter
J. Ducharme — E. Gibbon
H. Smith — G. Lanciault
E. Maslanka — S. Raudelunas
RESIDING AT: Hotel Dennis

NATIONAL VULCANIZED FIBRE ..... **Booth 1231**

National Vulcanized Fiber Co.
Wilmington 99, Del.

EXHIBITING FIRST TIME: Lestershire Spool Div. — the "Lock-Eze" jack spool with a new head design; a large package twister bobbin with new "Lock-Tite" construction. Kennett Materials Handling Div. — "Unilevel" truck with load leveling mechanism; a steaming box made of polyester fiber glass panels; a collapsible box which folds down to six inches; light weight conveyor box designed for Pfaff Varion transportation system.
ALSO SHOWING: Mill boxes in a variety of sizes and colors; roving cans up to 18" in diameter and featuring seamless construction; and a number of boxes for specialized textile machine applications.
PERSONNEL IN BOOTH:
E. B. Burnley, sales mgr., Kennett
G. M. Hutchinson, sales mgr., Lestershire

NEW DEPARTURE ..... **Booth 127**

New Departure Div. General Motors Corp.
Bristol, Conn.

NEWMARK ..... **Booth 1336**

Louis Newmark Ltd.
London, England
(See *STELLAMCOR*)

NIPPON ..... **Booth 1148**

Nippon Spindle Co.
Osaka, Japan
(See *RUDNICK*)

NISSEN ..... **Booth 759**

John P. Nissen, Jr., Co.
Glenside, Pa.

EXHIBITING: Writing tubes of dye-resistant and bleachproof inks for permanent identification of textiles through all finishing operations.
PERSONNEL IN BOOTH:
C. Ford — M. A. High, III

NORCROSS ..... **Booth 469**

Norcross Corp.
247 Newtonville Ave., Newton 58, Mass.

EXHIBITING: Complete line of viscometers for process control applications in the textile industry, including the Norcross "Sizeometer," a completely automatic system for preparing warp size in one-third the normal cooking time.
PERSONNEL IN BOOTH:
A. S. Norcross, pres.
R. A. Norcross, sales eng.
R. S. Davis, Jr., sales eng.
RESIDING AT: Mount Royal Motel

NORTH AMERICAN MFG. ..... **Booth 1402**

North American Mfg. Co.
4455 E. 71st St., Cleveland, Ohio

EXHIBITING: Web guiding equipment for tenter frames, examining machines, etc., featuring non-contact detection of misalignment by either pnuematic or photoelectric devices and hydraulic operation.

N. C. STATE ..... **Booth 1100**

School of Textiles, N. C. State College
Raleigh, N. C.

EXHIBITING FIRST TIME: Items that will stress nature and advantages of textile education and major features of the school's textile research activities.
PERSONNEL IN BOOTH:
M. E. Campbell, dean
E. B. Grover, head dept. of tex. tech.
W. A. Newell, dir. tex. res. center

O-M SPINNING MACHINE ..... **Booth 1148**

O-M Spinning Machine Mfg. Co.
Osaka, Japan
(See *RUDNICK*)

PARAMOUNT ..... **Booth 1145**

Paramount Textile Machinery Co.
131 S. Wabash Ave., Chicago 3, Ill.

EXHIBITING FIRST TIME: The Paramount Vacuum Steam Conditioner for packages of natural and synthetic yarns and combinations thereof.
PERSONNEL IN BOOTH:
W. Pope, pres.
J. C. Fenley, sales mgr.
P. Paulsen, eng.
W. H. Albertson, sales rep.
O. A. Siegel, sales rep.
RESIDING AT: Claridge Hotel

PARKINSON ..... **Booth 609**

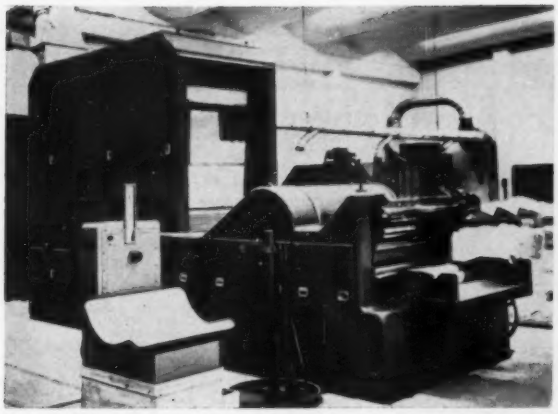
Edward Parkinson Mfg. Co., Inc.
Maple & Oak Sts., Esmond, R. I.

EXHIBITING: Tenter clips for all types of fabric and operations; cloth guiders (air and electric); hydraulic tension device for constant induced tension on all types of materials; an automatic cut-off winder offering many time-saving features; photographic exhibit of specially designed machinery for the textile and other industries.
PERSONNEL IN BOOTH:
A. F. Metzger, pres.
H. T. Prince, ch. eng.
R. H. Scott, dev. eng.
H. E. Klepadlo, sales
RESIDING AT: Shelburne Hotel

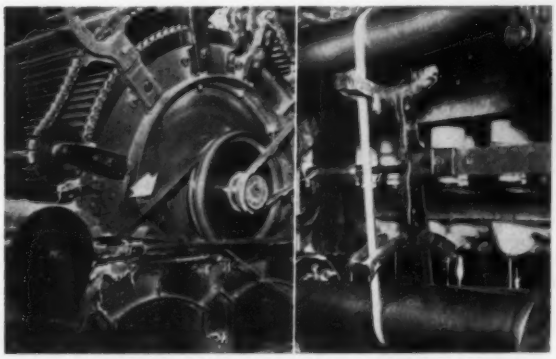
PARKS-CRAMER ..... **Booth 564**

Parks-Cramer Co.
Fitchburg, Mass.

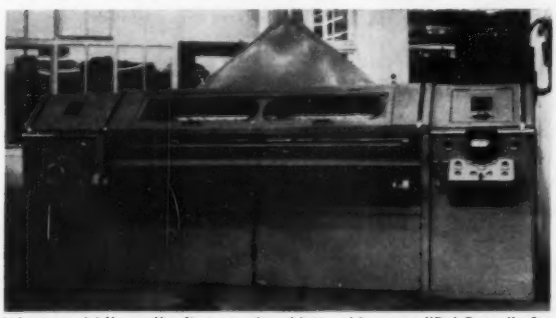
EXHIBITING: Complete line of traveling cleaner equipment (blowing and vacuum); SpinSaVac end collection equipment for spinning frames; SpinSa-Creel for spinning frames; "Certified Climate" systems for humidification and cooling.
PERSONNEL IN BOOTH:
M. Ford, pres.
C. D. Lee, vice-pres.
J. Nesmith, sales eng.
L. R. Sibley, sales eng.
W. B. Granger, sales eng.
J. C. Kelly, sales eng.
W. B. Walker, sales eng.
W. J. Buck, sales eng.
E. F. Kulp, sales eng.
C. E. Ware, sales eng.
W. W. Hewett, sales eng.
A. C. Buck, sales eng.
D. S. Gilchrest, sales eng.
G. F. Kellogg, exp. mgr.
E. H. Harding, adv. mgr.



The Trutzschler single process picker runs continuously, doffs automatically, and makes laps weighing as much as 66 lb. (E-349)

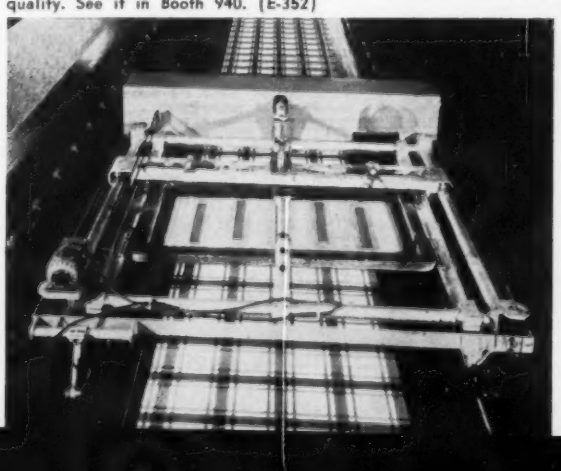


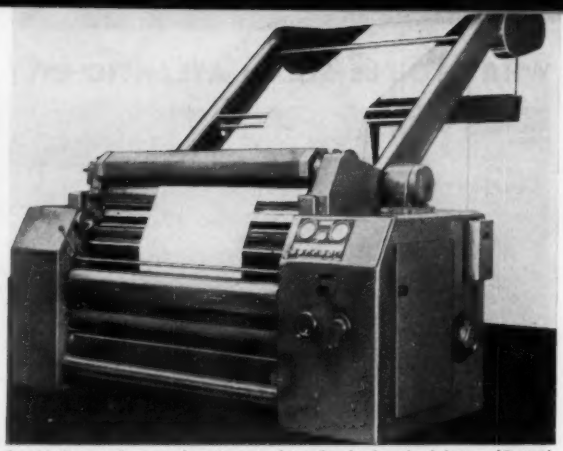
Featured in the Extremultus booth will be a 1"-wide lickerin drive belt (left photo) which is said to provide constant speed and a 1"-wide roving frame cone belt that improves package build. (E-350)



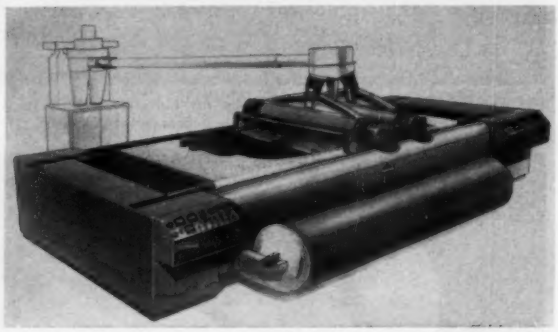
Woolart Mills will display the Heinz Hergert "Pol-Rotor" for electrifying high pile fabrics and upgrading woolens. (E-351)

Adaptable to existing screen printing tables is this SACM automatic, self-propelled carriage which is said to reduce cost and improve quality. See it in Booth 940. (E-352)

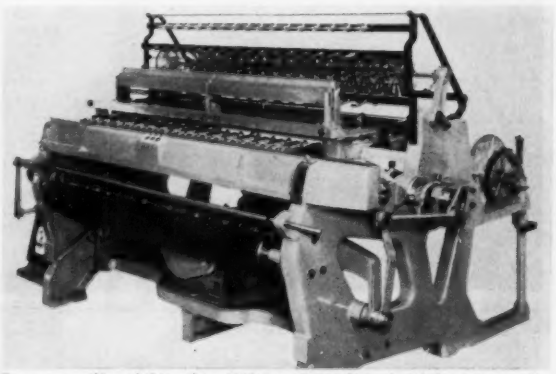




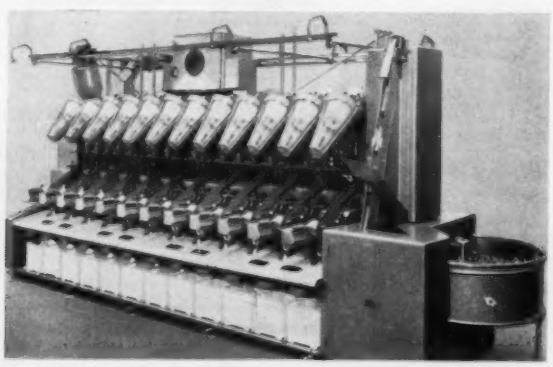
David Gessner's new shearing machine for high pile fabrics. (E-353)



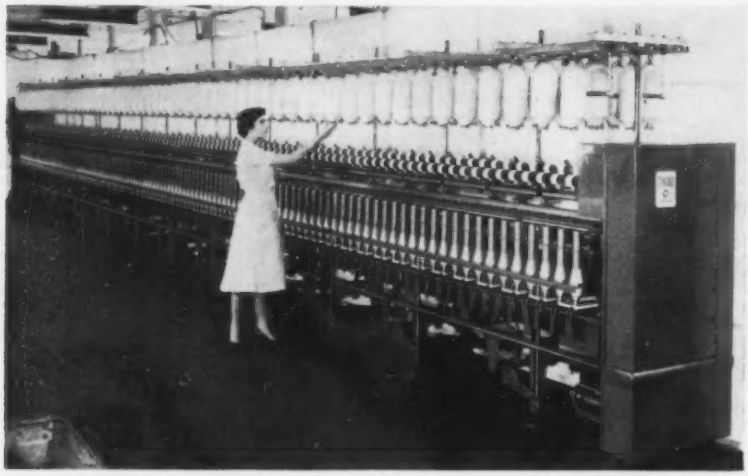
The Turbo Cross Shearer for loop and cut pile carpets shears across the fabric instead of lengthwise. Loops are sheared cleanly in one pass, the manufacturer claims. (E-354)



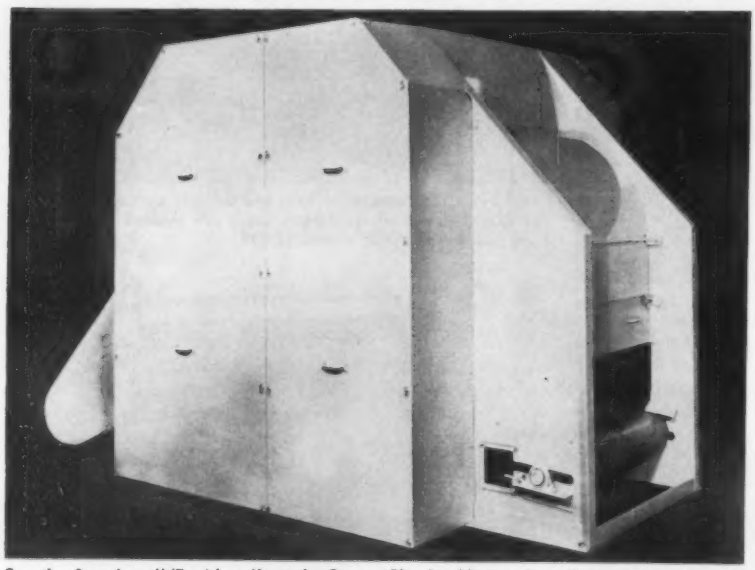
Texnovo will exhibit this "Ultratex" 16/25 shuttleless loom for making narrow fabrics up to 1" wide. (E-355)



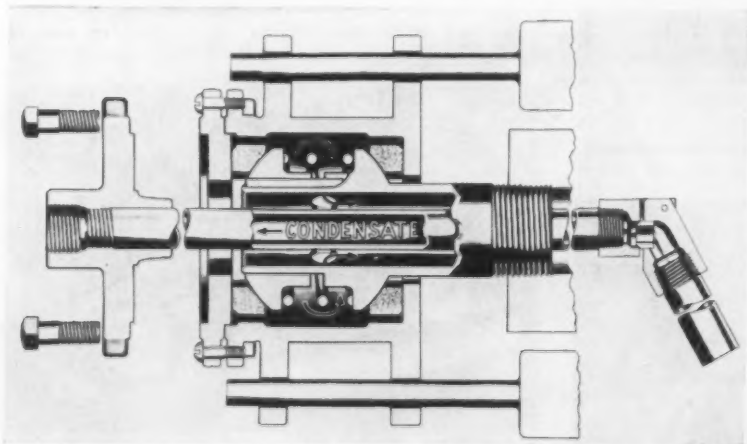
The Schweiter automatic filling winder, Type MSL, with dust removing device, rotor for tailless pirns, parallel pirn depositing device, and automatic feeding device for empty pirns. (E-356)



The Whitin "Standard" spinning frame for cotton system mills will be operating in the Bahnson Co. booth, according to an announcement by Whitin. (E-357)



See the Saco-Lowell/Davidson-Kennedy Opener-Blender-Cleaner for effectively opening and cleaning cotton — Booth 482. (E-358)



One of the rotary pressure joints (for slasher cylinders and dry cans) to be displayed by Johnson Corp is the Type "L-JSP" (rod supported) model with assembly plate and syphon elbow, cross-section view of which is shown here. (E-359)

PARKS & WOOLSON ..... **Booth 266**
Parks & Woolson Machine Co.
Springfield, Vermont
(See *RIGGS & LOMBARD*)

PARROTT & BALLENTINE ..... **Booth 1037**
Parrott & Ballentine Equipment Co.
3440 Augusta Rd., Greenville, S. C.

PATTERSON-KELLEY ..... **Booth 1501**
The Patterson-Kelley Co., Inc.
East Stroudsburg, Pa.

EXHIBITING FIRST TIME: Plastic working model of a process hot water heating system with emphasis on waste heat reclamation.
PERSONNEL IN BOOTH:
J. J. Coleman, ch. eng.
J. Peters, sales mgr.
N. Ermolovich, sales eng.
RESIDING AT: Lombardy Hotel

PENICK & FORD ..... **Booth 682**
Penick & Ford, Ltd., Inc.
750 Third Ave., New York 17, N. Y.

EXHIBITING: Starches and starch derivatives from corn as applied to warp sizing and finishing of textiles.
PERSONNEL IN BOOTH:
O. H. Tousey, vice-pres.
D. P. O'Connor, vice-pres.
P. G. Wear, sou. sales mgr.
G. M. Anderson, asst. sou. sales mgr.
J. R. Heard, tech. sales eng.
G. C. Henry, sales rep.
J. P. Holland, tech. sales eng.
W. J. Kirby, sales rep.
T. H. Nelson, sales rep.
D. K. Smith, sales rep.
RESIDING AT: Shelburne Hotel

PERKINS ..... **Booth 163**
B. F. Perkins & Son, Inc.
Holyoke, Mass.

EXHIBITING: A two-roll hydraulic tricot schreiner calender; a let-off package unit; a wind-up package unit; a hydraulic power unit; Mullen testers for knit goods; electro-mechanical batch counter for continuous production machinery; the "Electraumatic" seam detector; a shrink and stretch meter.
PERSONNEL IN BOOTH:
J. L. Perkins, Jr., pres.
B. F. Perkins, treas.
M. P. Duryea, asst. treas.
B. P. Astley, gen. sales mgr.
E. B. Norman, asst. sales mgr.
K. Zimmerli, ch. eng.
C. J. Stevens, eng.
H. Ball, eng.
W. Greenwood, eng.

PICANOL ..... **Booth 952**
Metiers Automatiques Picanol S.A.
1A Ave. de Pologne, Ypres, Belgium

PLATT ..... **Booths 943, 818, 171**
Platt Bros. (Sales) Ltd.
Oldham, Lancs, England
U. S. AGENT: Atkinson, Haserick & Co., Inc., Box 509, Framingham, Mass.

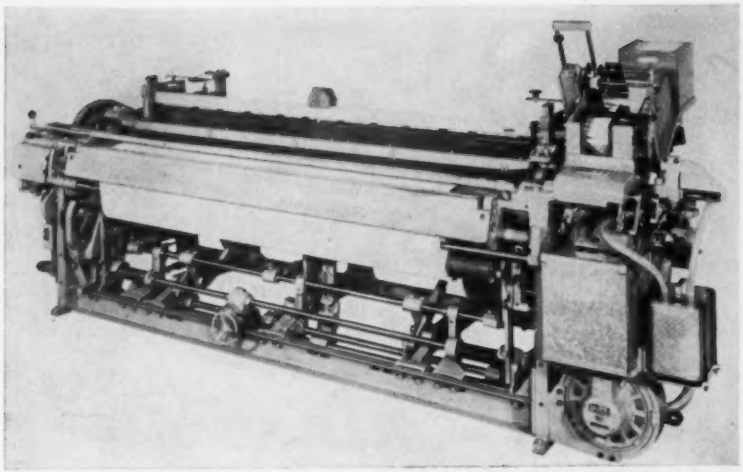
EXHIBITING: In Booth 943—The Hartford Comber; the M.D.F.5 draw frame; the M.S.3. speed frame with gantry creel; the M.R.4. ring frame with Spin-SaVac. In Booth 818—A revolving flat card; a pneumatic lap compressor. In Booth 171—A woolen tape condenser featuring no vibration, improved accessibility, internal drive to surface drum, multi-speed drive, new pattern eccentric motion shaft, and traversing wheel.
PERSONNEL IN BOOTH:
S. C. Seward, mg. dir.
B. A. P. Dobson
R. Whitaker
I. Marsden

PLUTTE, KOECKE ..... **Booth 948**
Plutte, Koecke & Co.
Ottostr I, Wuppertal-Barmen, Germany
U. S. AGENT: Atkinson, Haserick & Co., Inc., Box 509, Framingham, Mass.

EXHIBITING: "Hacoba" high speed automatic winding equipment for supply packages for braiders and narrow fabric looms.
PERSONNEL IN BOOTH:
D. Rosenkranz — R. P. Kinsman
F. Fassnacht — M. J. Lacey
N. J. MacDonald

PNEUMAFIL ..... **Booth 761**
Pneumafil Corp.
2516 Wilkinson Blvd., Charlotte 8, N. C.

EXHIBITING: The latest units (Model C-12) for suction cleaning of spinning



A special feature of this Ruti 1 x 1 automatic box loom is the automatic bobbin loading arrangement which is known as the "Container System." (E-360)

frames and collection of broken ends; "Pneumastop" roving frame stop motion combined with air cleaning; "Electrofil" apparatus which stops roving frame instantly when a creel break occurs, leaving a tail for piecing-up.
PERSONNEL IN BOOTH:
C. R. Harris, pres.
J. W. Barr, vice-pres. mkt.
M. E. Herndon, sales mgr.
G. E. Archer
W. W. Lloyd
D. J. Thorp
G. C. Fryer, adv. mgr.
RESIDING AT: Claridge Hotel

PORTLAND ..... **Booth 89A**

The Portland Co.
58 Fore St., Portland, Maine

EXHIBITING FIRST TIME: The "Statomatic" Model B1 shockless static eliminator for neutralizing static electricity in textiles in process.
ALSO SHOWING: Complete line of Chapman static eliminators, including a working model of the device.
PERSONNEL IN BOOTH:
F. E. Hanson, mgr.
D. E. Hardy, equip. eng.
J. J. Sapp, adv. mgr.
Representatives of Louis P. Batson Co. and Matthews Equipment Co.
RESIDING AT: Ritz-Carlton Hotel

PRESIN ..... **Booth 65**

Presin Co.
2014 Broadway, Santa Monica, Calif.

EXHIBITING FIRST TIME: A photoelectric weft (filling) feeler (Model LS 40 WF) for looms; a photoelectric bobbin feeler which is sensitive only to the Scotchlite on the filling bobbins; three-shift counters with built-in predetermining counter; automatic cycling predetermining counters.
PERSONNEL IN BOOTH:
M. D. Teichner, pres.
J. B. Lightstone, sales rep.
M. Coldwell, sales rep.
G. Holdsworth, sales rep.
R. Holdsworth, sales rep.

PROCTOR & SCHWARTZ ..... **Booth 579**

Proctor & Schwartz, Inc.
7th St. & Tabor Rd., Philadelphia 20, Pa.

EXHIBITING FIRST TIME: A complete finishing range (consisting of a padder, float dryer, tenter dryer, and rotary polymerizer), every component of which incorporates new features that provide savings in space and more flexibility in operation with no sacrifice in production rates; the "Proctor-Form" non-woven fabric web forming machine which is designed to process natural and synthetic fibers up to 6" long at up to 1,200 lb/hr in widths from 60" to 90"; the "Proctor Controlling Weigh Belt," a standard unit with a constant speed, chemically inert, light weight conveyor which continuously and automatically weighs material passing over it; the "Proctor Fiber Blending Feed" which automatically and accurately weighs and proportions various baled stocks into a process.
PERSONNEL IN BOOTH:
W. W. Sibson, Jr., vice-pres.
J. P. Wilson, vice-pres.
C. W. Schwartz, IV
A. G. Blank
T. H. Wentz
E. W. Gehrung
W. A. Dickinson, Jr.
R. E. Fink
L. M. Christianson
R. L. Hendricks
D. D. Cunningham
J. P. Christ
Dr. Ing. Meier-Windhorst, Artos
J. Dalglish, John Dalglish & Sons, Ltd.

QUALITEX ..... **Booth 1221**

N.V. Electronische Apparatenfabrik "Qualitex"
Enschede, Holland
(See *TEXTILE ELECTRONICS*)

RAXHON ..... **Booth 851**

Ateliers Raxhon, S. A.
Theux-lez-Verviers, Belgium

REED ..... **Booth 277**

Robert C. Reed Co.
400 N. Fifth St., Harrison, N. J.

EXHIBITING FIRST TIME: Aluminum card staves for processing jute, flax, and other vegetable fibers and man-made fibers.
ALSO SHOWING: All types of staves and lags for preparatory equipment, including waste processing machines.
PERSONNEL IN BOOTH:
W. E. Macpherson, sales mgr.

REINER ..... **Booths 1305, 1331, 1339**

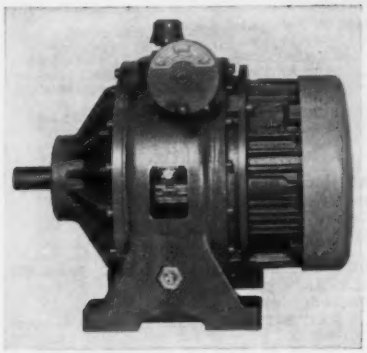
Robert Reiner, Inc.
550-564 Gregory St., Weehawken, N. J.

EXHIBITING FIRST TIME: In Booth 1305—The "Conorapid" Precision Cross Winder which produces various package forms at speeds ranging from 2,000 to 4,000 rpm; a combination warper-beamer for making beams for knitting and weaving. In Booth 1331—The Famatex high-production, single layer tenter, a versatile and compact machine for tentering, drying, and heat-setting of any woven or warp-knit cloth of natural or synthetic fibers. In Booth 1339—The Schaffhouse flyerless rubber thread covering machine (Model SUMA) on which spindles can be instantly stopped individually simply by pushing them clear of the driving belt.
PERSONNEL IN BOOTH:
J. A. Vollman
W. Horn — Mr. Wyss
H. D. Scheube — A. Schaufelberger
H. C. Feustel — K. T. Marx

REPUBLIC STEEL ..... **Booth 676**

Republic Steel Corp.
Republic Bldg., Cleveland, Ohio

EXHIBITING: "Endura" stainless steel and products fabricated from this metal for the textile industry; plastic pipe, containers, tubing, fasteners, and materials handling equipment.



The Cleveland 7K6 Speed Variator with built-on 5 hp pancake motor may be seen in Booth 298. (E-361)

RHODIA ..... **Booth 35**

Rhodia, Inc.
60 E. 56th St., New York, N. Y.

EXHIBITING: Rhovyl fibers, including shrink and non-shrink types, Rhovyl 55, and Rhovyl T; fabrics made of these fibers.
PERSONNEL IN BOOTH:
L. Hochstaedter, tech. adv. & sales dir.
Dick Netland, asst.
RESIDING AT: Saxony Motel

RIETER ..... **Booths 5, 19**

Joh. Jacob Rieter & Co., Ltd.
Winterthur, Switzerland
(See *AMERICAN RIETER*)

RIGGS & LOMBARD ..... **Booth 266**

Riggs & Lombard, Inc.
Foot of Suffolk St., Lowell, Mass.

EXHIBITING: A Vibrator for processing all types of fabrics; a new high-speed cotton shear; a shear for pile fabrics; a fulling mill with heat control; an automatic storage scray for straight line processing; the "Compactor" for removing relaxation shrinkage in fabrics and to provide surface effects; miscellaneous H-Glass (fiber glass) items, including cloth trucks and pails.

ROANNAIS ..... **Booth 1054**

Ateliers Roannais de Constructions Textiles
Roanne, France

ROBERTS ..... **Booth 344**

Roberts Co.
Sanford, N. C.

EXHIBITING FIRST TIME: A narrow (25" wide) worsted spinning frame, the "Arrow" Model WM-1, incorporating a new version of the PermaSet drafting system which can be run either as a 4-roll full control system or as a 3-roll adjustable system and also an improved suction cleaning arrangement; two machines from the new line of long fiber pinning and drawing equipment—the Roberts-Tematex Auto-Evener which is a single-head, single-delivery ParaDrafter with an electronic-mechanical control unit that corrects sliver entering with a weight variation of ± 20 per cent into a delivered sliver with a maximum variation of ± 1 per cent; and the Para-Blender which combines two Para-Drafter heads with a unique and simple arrangement for combining and sandwich blending finished slivers onto a center ball delivery, providing a large number of doublings plus melange blending of a high number of slivers.
ALSO SHOWING: The "Arrow" M-1 cotton system spinning frame with a number of refinements; the "Arrow" WM-2 worsted system spinning frame with new drafting system.
PERSONNEL IN BOOTH:
R. E. Pomeranz, pres.
J. N. Pomeranz, vice-pres.
G. N. Giraudi, vice-pres.
R. Padgett, vice-pres.
M. C. Golden — S. Kent
R. F. Walker — C. Oliver
RESIDING AT: Colony Motel

WHAT YOU'LL SEE IN ATLANTIC CITY

ROTHKOPF ..... **Booth 1401**

Mac M. Rothkopf & Co.
317 Bushwick Ave., Brooklyn 6, N. Y.

EXHIBITING FIRST TIME: Latch type knitting needles manufactured by Lebocey Needle Co. of France; McRoth needles.
PERSONNEL IN BOOTH:
M. M. Rothkopf, pres.
G. A. Rothkopf, sec. & treas.
A. Rothkopf, sales mgr.

ROTHSCHILD ..... **Booth 18A**

Rothschild-Messinstrumente
Zurich, Switzerland
(See *FABRIONICS*)

ROY ..... **Booth 408**

B. S. Roy & Son Co.
801 Southbridge St., Worcester, Mass.

EXHIBITING FIRST TIME: A centerless cot grinder for exact and uniform truing of cots for spinning frames; a cot tester; sample card clothing; in-place portable roll grinder; top flat irons by Nocker.
ALSO SHOWING: Card grinding machines in operation.
PERSONNEL IN BOOTH:
D. H. Dewar, Jr., pres.
F. Buonomo, ch. eng.
D. Bousquet, sales mgr.
F. J. Leppkes, foreign prin.

ROYAL WORCESTER ..... **Booth 1217**

Royal Worcester Industrial Ceramics Ltd.
Tonyrefail, Glamorgan, South Wales, England

EXHIBITING FIRST TIME: Thread guides and other ceramic parts made of "Regalox" alumina oxide.
PERSONNEL IN BOOTH:
Roy D. Faigenbaum, Amer. rep.

RUDEL ..... **Booth 378**

Rudel Machinery Co., Ltd.
614 St. James St. West, Montreal, Canada

RUDNICK ..... **Booth 1148**

Edward S. Rudnick, Representatives
P. O. Box 244, New Bedford, Mass.

EXHIBITING FIRST TIME: The Kanegafuchi "Auto-Doffer," a machine that automatically doffs a full length spinning frame in less than two minutes, operating on an O-M sliver-to-yarn spinning frame equipped with automatic stop motion and starting clutch for automation in spinning room operation; the O-M high speed drawing frame featuring production speeds above 400 ft/min and automatic can changing; the "Ever-Even" automatic evenness control for cotton and worsted drawing frames; the Daiwa attachment for cotton cards to increase carding rate and effectiveness.
ALSO SHOWING: The O-M sliver-to-yarn spinning frame with latest improvements, including spindle speed regulating apparatus, automatic stop and rail lowering motion (with doffing pilot lamp), automatic starting clutch, automatic lubrication, and increased can and bobbin capacities; the G. K. automatic picker lap scale; Izumi wooden spinning tubes and filling bobbins; Godo shuttles; Nippon card clothing; Nihon spindles and automatic continuous card strippers; anti-friction rings.
PERSONNEL IN BOOTH:
E. S. Rudnick
W. Bowlin, Carolinas agent
J. M. Urrutia, Latin Amer. rep.
I. Uchibe, O-M eng.
T. Hiki, Mitsui & Co.
A. Aoki, Daiwabo eng.
T. Fujiwara, Kanegafuchi eng.
RESIDING AT: Shelburne Hotel

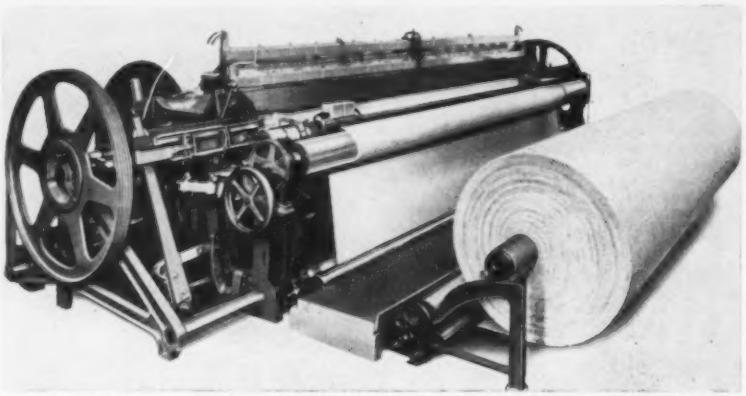
RUTI ..... **Booth 1319**

Ruti Machinery Works Ltd.
Ruti (Canton of Zurich), Switzerland

U. S. AGENT: H. J. Theiler Corp., Whitinsville, Mass.

EXHIBITING FIRST TIME: The "Container System" (automatic bobbin loader) on two high-speed looms—a 4 x 1 automatic which is particularly suited for fancy and check fabrics and a 1 x 1 automatic box loom for a wide variety of fine and coarse filling; a large photograph of a 1 x 1 Automatic Container loom for rayon fabrics; an automatic high-speed loom equipped with the Unifil loom winder; a 4 x 1 automatic bobbin changing loom for silk and rayon fabrics.
PERSONNEL IN BOOTH:
A. H. Deucher, pres.
E. Bolsterli, export sales mgr.
E. Kasper, export sales

Width of fabrics is automatically indicated and/or recorded by the Margin Meter, Model A-2, mill installation of which is shown here. See the device in Matrix Controls' booth. (E-362)



The "Ruthardt-Super" loom for production of backings for tufted carpets, canvas and duck, and carpets of jute, etc., will be exhibited by Albert Jurgens. (E-363)

SACCARDO ..... **Booth 663**

Industrie Saccardo Soc. p. Az.
Schio (Vicenza), Italy
(See *LENKOTEX*)

SACM ..... **Booths 844, 940, 1016**

Societe Alsacienne de Constructions Mecaniques
Mulhouse, France

U. S. AGENT for worsted machinery: Atkinson, Haserick & Co., Inc., Framingham, Mass.

U. S. AGENT for cotton machinery: Medley Mfg. Co., Columbus, Ga.

EXHIBITING FIRST TIME: Booth 844 (Cotton Exhibit)—a high speed, two-head drawing frame, Model ER, which offers more even sliver production, high efficiency, simplified settings and maintenance. Booth 940 (Printing Exhibit)—An automatic, self-propelled carriage for existing screen printing tables which economically duplicates results obtained by hand. Booth 1016 (Worsted Exhibit)—The latest model of the "Perl" comb for worsteds and synthetics, a high-production, rectilinear (French) comb featuring a conveyor for automatic noil removal, adjustment of web tension without stopping machine, and refinements of air flow control.
PERSONNEL IN BOOTH:
J. Nifenecker, mgr.
G. Weinberger, asst. mgr.
J. F. Berry, U. S. rep.
L. H. Morrison, Medley Mfg. Co.
R. Leslie, Jr., Atkinson, Haserick
RESIDING AT: Marlborough-Blenheim

SACO-LOWELL ..... **Booths 99, 482**

Saco-Lowell Textile Machinery Division
Easley, S. C.

EXHIBITING FIRST TIME: A roving frame that is newly designed from the floor up to provide higher production rates and larger packages than ever before attained and to eliminate typical roving problems such as deflected flyer arms; the Saco-Lowell/Uster Versamatic - ADC drawing frame with electronic automatic drafting control (device automatically varies speed of front roll to compensate for changes in sliver weight); a Versa-Matic drawing frame with pneumatic clearers and readily accessible top rolls which operates at speeds up to 600 ft/min; the SJ worsted spinning frame, a Gwaltney type machine that provides wide versatility in drafting worsteds, synthetics, and blends and produces higher quality yarns at lower costs; the Saco-Lowell/Fleissner dryer for drying all types of raw stock and loose fibers, including top, tow, skeins, non-woven fabrics, and knitted goods; the Saco-Lowell/Davidson - Kennedy Opener-Blender-Cleaner which offers a substantial increase in production (up to 1500 lb/hr) with removal of from 30 to 50 per cent of trash.
ALSO SHOWING: The MagneDraft system of obtaining roll pressures in spinning frame drafting element by using magnetic top rolls.
PERSONNEL IN BOOTH:
T. J. Ault, pres.
J. W. Hubbard, vice-pres. sales
A. L. Landau, asst. gen. mgr. & sales mgr.
H. J. Jones, asst. gen. sales mgr.
E. T. Cansler, dist. mgr.
J. E. Wright, dist mgr.
F. S. Culpepper, dist. mgr.
J. W. Dickert, dist. mgr.
G. F. Wilcox, dist. mgr.
RESIDING AT: Claridge Hotel and Colony Motel

SAENTIS ..... **Booth 1140**

Saentis, Inc.
2911 Summit Ave., Union City, N. J.
(See *SAURER*)

SAHM ..... **Booth 833**

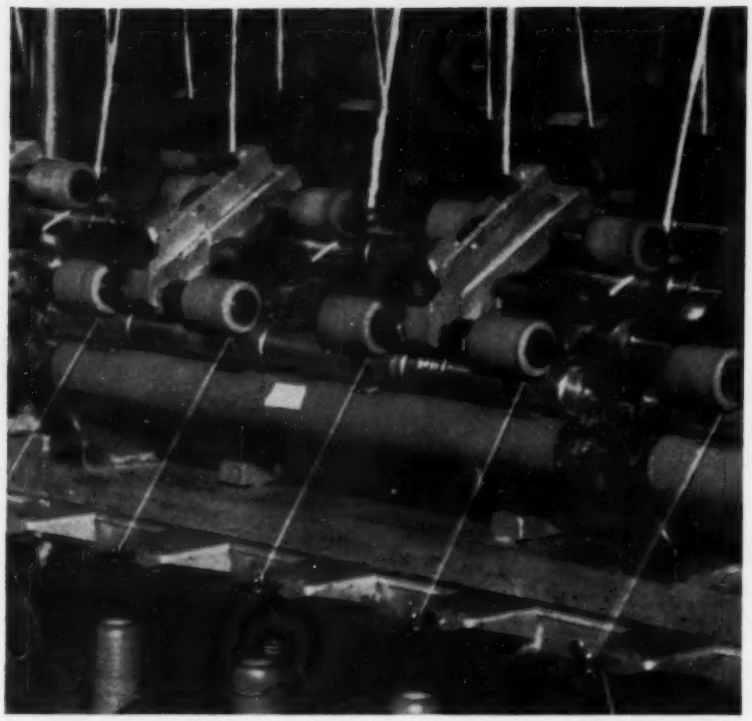
Georg Sahm, Maschinenfabrik
Sudentenland-Str. 33, Eschwege, Germany
(See *COSA*)

SAMPLE WEAVING ..... **Booth 910**

The Sample Weaving Machine Co., Ltd.
Liestal, Switzerland

U. S. AGENT: Schmidt Mfg. Co., P. O. Box 560, New Bedford, Mass.

EXHIBITING FIRST TIME: A loom for weaving samples that features electromagnetic control of the harnesses.
PERSONNEL IN BOOTH:
P. J. Werner, mgr.



A. B. Carter, Inc., will show this "Phantom" drafting changeover featuring fewer parts and elimination of necessity for spinners to break back roving. (E-364)

SANT' ANDREA ..... **Booth 1223**

Sant' Andrea Novara
Novara, Italy

U. S. AGENT: Ernest L. Frankl Associates, 515 Madison Ave., New York 22, N. Y.

EXHIBITING FIRST TIME: Two Model PS rectilinear combing machines, one processing wool at 160 nips/min and the other synthetics at 175 nips/min; a high speed intersecting gill box, Model SD/n, with automatic evenness regulator; a high speed roving frame with special high draft roller drafting system and bobbin delivery through rub apron false twist motion, operating at front roll speed of 55 ypm.

PERSONNEL IN BOOTH:
G. Masera — C. Schleifer
G. Bettolo — P. Savoini

SARGENT ..... **Booth 470**

C. G. Sargent's Sons Corp.
Graniteville, Mass.

EXHIBITING FIRST TIME: A newly designed gas-fired, single pass stock dryer for uniform and low cost drying of all fibers; a synthetic staple opener and blender for wet or dry stock.

PERSONNEL IN BOOTH:
F. S. Smith, treas. & gen. mgr.
R. W. Hall, ch. eng.
R. D. Lambert, res. eng.
A. G. Forty, sales eng.
D. A. Crocker, sales eng.
B. H. Crocker, coordinator
E. Carkin, eng.
F. E. Wasson, sales eng.
J. R. Angel, sales eng.
H. Williams, sales eng.
D. H. Caldwell, sales eng.

RESIDING AT: Hotel Dennis

SAURER ..... **Booth 1140**

Adolph Saurer, Ltd.
Arbon, Switzerland

U. S AGENT: Saentis Inc., 2911 Summit Ave, Union City, N. J.

EXHIBITING: A fully automatic 6 x 1 drop box loom, Type 100W; a single-shuttle loom, Type 100W, with self-acting magazine reloading device directly from the filling winding machine's transport boxes (Box Loader); a single-shuttle automatic loom, Type 100W, combined with loom winder and bobbin stripping device; an automatic terry towel loom, Type 100W, combined with electromagnetic name weaving apparatus (system "Huttwil"); automatic embroidery machine.

PERSONNEL IN BOOTH:
S. Remy, dir.
F. Forrer, eng.
A. Schneider, sales rep.

SCHAFFHOUSE ..... **Booth 1339**

Schaffhouse Knitting Machine Works Ltd.
Schaffhouse, Switzerland

(See *REINER*)

SCHARER ..... **Booth 935**

Scharer Textile Machine Works
Erlenbach-Zurich, Switzerland

(See *YEOMANS*)

SCHILDE ..... **Booth 827**

Benno Schilde Maschinenbau-AG
Bad Hersfeld, Germany

(See *COSA*)

SCHLAFHORST **304**

W. Schlafhorst & Co.
M. Gladbach, Germany

(See *TERRELL*)

SCHLUMBERGER ..... **Booth 1423**

N. Schlumberger & Cie.
Guebwiller (Haut-Rhin), France

EXHIBITING FIRST TIME: A rectilinear combing machine, Model PB 25 L, which operates at speeds of 125 to 140 strokes per min; a finisher intersecting gill box, Type GNIB-RE, equipped with draft regulator and providing delivery speed ranging from 65 to 110 ypm.

PERSONNEL IN BOOTH:
A. Turpin, expt. mgr.
L. A. Field, U. S. agent
P. Engel, comm. dept.
T. Schramm, erec. insp.

RESIDING AT: Hotel Traymore

SCHMIDT ..... **Booth 646**

Schmidt Mfg. Co.
P. O. Box 560, New Bedford, Mass.

EXHIBITING FIRST TIME: "Duraflex" and "Rubberset" loom reeds; "Micro-Shave" temples that eliminate shearing; "Patent Bar" temples that run the entire width of the cloth; "Compreg-Beech" shuttles and bobbins.

ALSO SHOWING: "Polydur" pickers, lug straps, sweepsticks, gears, let-off bands; "Grob" lightmetal harness frames and flat steel, leno, and twine wire heddles; ring temples with nylon bushed rings; K-15 silicone warp spray to eliminate chafed and broken ends; "Shirley" line gratings and testing instruments; other late improvements in picker sticks, bumpers, harness strapping, check straps, binder and box coverings, race plate felts, and shuttle linings. See also SAMPLE WEAVING.

PERSONNEL IN BOOTH:
C. Schmidt — M. Diggelmann
R. F. Schmidt — K. Brenna
J. C. Motta — C. Bulcock
T. Huston — E. Runge
O. C. Walker

RESIDING AT: Hotel Shelburne

SCHOLL ..... **Booth 837**

Scholl A. G.
Zofingen, Switzerland

(See COSA)

SCHWEITER ..... **Booth 1040**

Schweiter Ltd.
Horgen (Zurich), Switzerland

U. S. AGENT: H. J. Theiler Corp. Whitinsville, Mass.

EXHIBITING: For weaving mills—Automatic pirn winders for cotton, wool, and man-made fibers with automatic feeding device for empty pirns, dust removing device, "Rotor" device to cover the tail end at the heads of the pirns, bunch at tip of pirn, parallel pirn arrangement suitable for all kinds of materials; automatic pirn winders with individual multi-cell magazine for synthetic yarns, with pirn depositing device; automatic hollow cop winders for wool, jute, and linen; automatic supercop winders for production of supercops on initial cones, for cotton, wool, and linen. For knitting mills—Cone winder for wool and cotton; cone winder for stretch yarns; a precision winder for making pineapple cones of filament synthetics; a precision cone winder for stretch yarns.

PERSONNEL IN BOOTH:
W. Gutzwiller — H. J. Theiler
F. Bolliger — H. Badertscher

RESIDING AT: Shelburne Hotel

SCOTT ..... **Booth 553**

Scott Testers, Inc.
101 Blackstone St., Providence, R. I.

EXHIBITING: The Model CRE (constant-rate-of-extension) tensile tester which incorporates inertialess electronic weighing, upward moving crosshead, and push-button controls; the Model IP-4 "Scotamatic" incline-plane tensile tester equipped for unattended yarn testing and electronic digital recording.

SCRAGG ..... **Booth 1425**

Ernest Scragg & Sons Ltd.
Macclesfield, England

U. S. AGENT: International Sales Management Co., 123 N. Poplar St., Charlotte, 2, N. C.

SEYDEL-WOOLLEY ..... **Booth 57**

Seydel-Woolley & Co.
748 Rice St., N. W., Atlanta, Ga.

EXHIBITING: The "Niagara" twist setter for eliminating difficulties caused by filling kinks in weaving; the "Seyco" warp lubricator for applying lubricating oils or waxes to the warp yarn sheet between the drying section of the slasher and the leasing section; warp sizing compounds, softeners, detergents, dye assistants, aids for compressive shrinking, mercerizing assistants, wash-and-wear resins, etc.

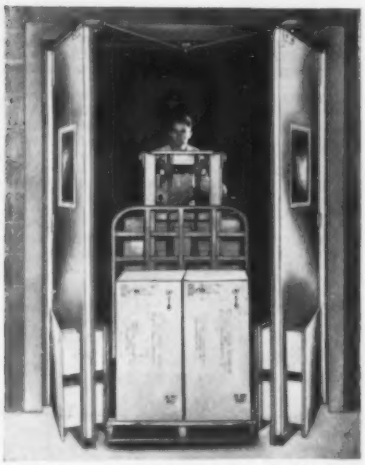
PERSONNEL IN BOOTH:
V. Woolley, pres.
P. V. Seydel, exec. vice-pres.
W. LaGrone, vice-pres.
J. Seydel, sec. & treas.

SHARPLES ..... **Booth 9**

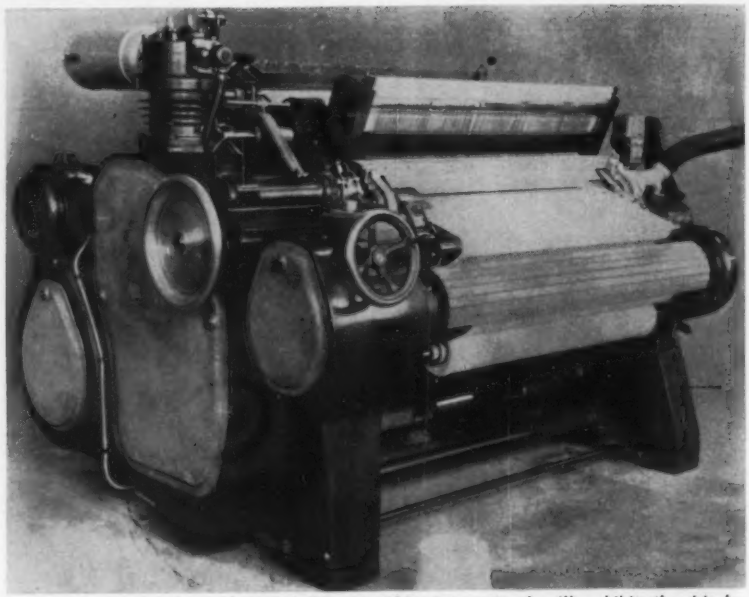
The Sharples Corp., Fletcher Div.
2300 Westmoreland St., Philadelphia 44, Pa.

EXHIBITING: A high capacity, 48" dia., all stainless steel "Whirlwind" extractor featuring automatic air braking with "finger-tip" timer control mounted on balancing stand.

WHAT YOU'LL SEE IN ATLANTIC CITY



Clark Door will show this shock absorber door for use where frequent opening by lift truck, etc., is required. (E-365)



Southeastern Loom & Machine Works and Edda International will exhibit the Maxbo shuttleless loom featuring propulsion of filling by air jets. (E-366)

SHEFFIELD ..... **Booth 384**

The Sheffield Corp.
Box 893, Dayton 1, Ohio

EXHIBITING FIRST TIME: The "Pocket" Micronaire, a self-contained, pocket-size instrument which indicates the fineness of cotton fibers; a new automatic Micronaire designed to eliminate wear on the plunger and cylinder and to speed inspection.
ALSO SHOWING: Standard model Micronaire fiber fineness testers; the "Neptel" electronic yarn imperfection counter.
PERSONNEL IN BOOTH:
W. I. Wilt, vice-pres.
Dr. H. Brown, consultant
J. Price, eng.
J. Heberle, eng.
RESIDING AT: Claridge Hotel

SIMCO ..... **Booth 610**

The Simco Co.
920 Walnut St., Lansdale, Pa.

EXHIBITING FIRST TIME: The "Aerostat Blower Ionizer" for static charge neutralization in areas where conventional static eliminator bars cannot be used because of space limitation; the "Electrostatic Locator" for analyzing static problems; a moisture indicator for setting off a visible or audible alarm in a drying area when proper dryness of material is reached.
ALSO SHOWING: Electrical static eliminators for all types of textile machinery; "Neutro-Stat" antistatic spray.
PERSONNEL IN BOOTH:
D. Simons, partner
H. A. Schweriner, appl. eng.
W. W. Levy, ch. eng.
W. Rowedder, sales rep.
RESIDING AT: The Empress Motel

SJOSTROM ..... **Booth 659**

Sjostrom Machine Co.
134 N. W. 16th St., Boca Raton, Fla.

EXHIBITING FIRST TIME: The "Guillotine" cut-off machine for cutting and stacking textiles.
ALSO SHOWING: "Knotwood" steel feed aprons.
PERSONNEL IN BOOTH:
R. L. Sjostrom, pres.
B. Johannessen, supt.
G. Mansfield, sales
RESIDING AT: Ritz-Carlton Hotel

S K F ..... **Booth 29**

SKF Industries, Inc.
Front St. & Erie Ave., Philadelphia 32, Pa.

EXHIBITING FIRST TIME: The HF high speed roller bearing for cotton spinning; HZ roller bearing bolster for heavy package, high speed twisting; "Draftrite" roller bearing top roll; PK series pendulum weighting arms designed for high quality, center suspension, drafting of cotton, synthetics, and worsteds.
ALSO SHOWING: Belt guide roller; tension pulley.

SKF continued

PERSONNEL IN BOOTH:
D. C. Black, sales
J. O. Cushing, dist. mgr.
B. F. Davis, sales
H. Feil, eng.
R. E. Kinney, mgr. tex. sales
B. K. Lathbury, dir. expt. sales
J. T. Paradise, dist. mgr.
A. B. Studley, sales
RESIDING AT: Shelburne Hotel

SMITH ..... **Booth 350**

James Smith & Son, Inc.
782 Southbridge St., Worcester, Mass.
(See HOOD)

SNEDEKER ..... **Booth 1000**

Snedeker & Co., Inc.
Ansonia, Conn.

EXHIBITING FIRST TIME: Texnovo shuttleless looms for making narrow fabrics—an "Ultratex" 16/25 needle loom for making fabrics up to 1" wide, another with an attachment which enables it to make fabrics up to 1½" wide, and a TX. 8/80 bobbin loom for making fabrics up to 3¼" wide.
PERSONNEL IN BOOTH:
A. J. Groh, pres.
E. J. Groh, asst. treas.
C. Villa, ch. tech. Texnovo

SOABAR ..... **Booth 10**

Soabar Co.
4219 Van Kirk Ave., Philadelphia 24, Pa.

EXHIBITING FIRST TIME: Automatic ticket and label marking equipment.
PERSONNEL IN BOOTH:
S. N. White, asst. sales mgr.
C. B. Hutchinson, sales mgr.
T. B. Clute, dist. mgr.
J. Meehan, natl. accts. mgr.
O. Turran, dist. mgr.
B. S. Gowdy, dist. mgr.
W. A. Roberts, dist. mgr.
RESIDING AT: Dunes Motel

SOBELCARD ..... **Booth 850**

S. P. R. L. Sobelcard
84 rue d'Harelbeke, Zwevegem, Belgium

EXHIBITING FIRST TIME: All-steel metallic card clothing and saw tooth wire.
PERSONNEL IN BOOTH:
P. Ducate
RESIDING AT: Ambassador Hotel

SONOCO ..... **Booth 82**

Sonoco Products Co.
Hartsville, S. C.

EXHIBITING: Paper cones, tubes, spools, cores, bobbins, and specialities.

Sonoco continued

PERSONNEL IN BOOTH:
C. H. Campbell, vice-pres. sales
C. W. White, dir. sales
J. K. Taylor, asst. dir. sales
W. K. Lewis, sales coordinator
L. H. Stokes, sou. sales mgr.
A. K. Gildersleeve, nor. sales mgr.
J. A. Durkin, east. div. sales mgr.
J. A. Reagan, adv. mgr.

SOUTHEASTERN LOOM ..... **Booth 1229**

Southeastern Loom & Machine Works
Division of Abney Mills
Greenwood, S. C.

EXHIBITING FIRST TIME: The Maxbo shuttleless loom which has fewer parts than conventional looms as filling is propelled by air jets. [Loom is built by Southeastern under license from Maxbo of Sweden, and sold in U. S. by Edda International (Booth 1227).]

SOUTHERN TEXTILE NEWS ..... **Booth 701**

"Southern Textile News"
Johnston Bldg., Charlotte 1, N. C.

SPAULDING ..... **Booth 397**

Spaulding Fibre Co., Inc.
Washington St., Dover, N. H.

SPEIZMAN ..... **Booth 1535**

Morris Speizman Co., Inc.
508 W. Fifth St., Charlotte 1, N. C.
(See *INTERSTATE*)

SPENCER & HALSTEAD ..... **Booth 1047**

Spencer & Halstead Ltd.
Ossett, Yorkshire, England
U. S. AGENT: Atkinson, Haserick & Co., Inc., Box 509, Framingham, Mass.

EXHIBITING: Vortex oiling device; oily wool conveyor fan unit; rotary spreader; "mock-up" fearnaught machine.
PERSONNEL IN BOOTH:
A. W. Hayden
D. D. MacDonald
E. Bramhall

SPINTEX ..... **Booth 643**

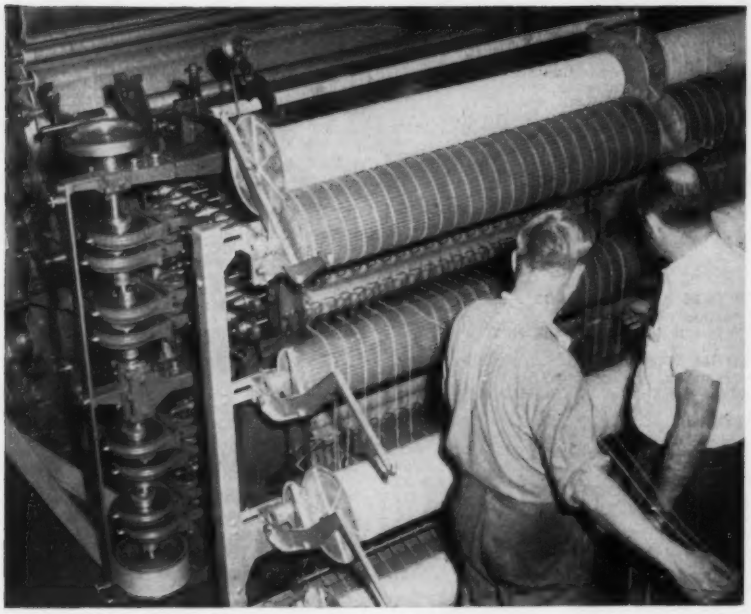
Spintex Spinnerei-Maschinenbau
Murrhardt/Wurtt., Germany
(See *LENKOTEX*)

SRRL ..... **Booth 755**

Southern Regional Reasearch Laboratory
Agricultural Research Service
U. S. Department of Agriculture
P. O. Box 19687, New Orleans, La.

STANDFAST ..... **Booth 1341**

Standfast Dyers & Printers Ltd.
Caton Rd., Lancaster, England



This Model L-5A heavy duty tape condenser will be operating on a 1960 Model L 84" woolen card in the Davis & Furber booth. (E-367)

Yarn count is directly obtained with this Yarn Balance, Model H23C10/13, to be featured by Mettler Instrument. (E-368)

Standfast continued

U. S. AGENT: Atkinson, Haserick & Co., Inc., Box 509, Framingham, Mass.

EXHIBITING FIRST TIME: A Standfast patent continuous molten metal vat dyeing machine for woven fabrics.
PERSONNEL IN BOOTH:
A. Ogden, dir.
E. G. Stone, dye. tech.
V. Hartley, dev. eng.
RESIDING AT: Marlborough-Blenheim

STALEY ..... **Booth 165**

A. E. Staley Mfg. Co.
Eldorado & 22nd Sts., Decatur, Ill.

EXHIBITING FIRST TIME: The Staley High-Temperature Converter for preparing warp sizes from unmodified corn starch.
PERSONNEL IN BOOTH:
R. L. Nagle, mkt. mgr.
E. Grosse, head, tex. lab.
W. N. Dulaney, Atlanta mgr.
H. Ector, asst. mgr.
H. A. Mitchell, tech. sales supv.
D. A. Barnes, tech. sales supv.
C. A. Adams, sales rep.
C. Garren, sales rep.
L. McCall, sales rep.
B. O. Merritt, sales rep.
A. L. Woodington, sales rep.

STEEL HEDDLE ..... **Booth 420**

Steel Heddle Mfg. Co.
2100 W. Allegheny Ave., Philadelphia 32, Pa.

EXHIBITING FIRST TIME: Equipment for all new looms on exhibition by American and European manufacturers.
ALSO SHOWING: Complete line of flat steel heddles, harness frames, reeds, picker sticks, and shuttles.
PERSONNEL IN BOOTH:
H. W. Fehr, pres.
J. J. Kaufmann, vice-pres.
F. H. Kaufmann, vice-pres.
H. P. Goodwin, sou. sales mgr.
A. J. Kieny, nor. sales mgr.
G. D. McGill, sou. prod. mgr.
D. W. G. Macintyre, dist. mgr.
S. Zimmerman, Jr., dist. mgr.
D. L. Batson, dist. mgr.
R. B. Stevens, dist. mgr.
H. D. Hammond, dist. mgr.
C. E. Morrison, dist. mgr.
J. W. Elliott, dist. mgr.

STEELE CANVAS ..... **Booth 293**

Steele Canvas Basket Co., Inc.
199 Concord Turnpike, Cambridge 40, Mass.

EXHIBITING: Canvas baskets, trucks, hampers, bags, and specialties.

Steele Canvas Basket continued

PERSONNEL IN BOOTH:
G. L. Whynaught, sales
A. J. Cecchi, sales
RESIDING AT: Ritz-Carlton

STELLAMCOR ..... **Booth 1336**

Stellamcor, Inc.
10 E. 43rd St., New York 17, N. Y.

EXHIBITING FIRST TIME: Cotton and worsted spinning equipment manufactured by A. Carniti & Cie (two frames); electronic quality and production control equipment by Louis Newmark Ltd., including a yarn tension balance for comparing tensions in warps at the loom, a "Vibrascope" for accurate determination of denier of any fiber sample of length greater than 3 cm, a "strainometer" for detection and measurement of many yarns faults, a yarn tension transducer for measuring yarn tension continuously, a yarn filament counter, and the W. I. R. A. Fibre Diagram Machine for testing fiber length in samples of top. See also LA DURANITRE and GILBOS.
PERSONNEL IN BOOTH:
F. S. Levy, vice-pres. & treas.
D. Carniti, A. Carniti & Cie
W. T. Cowhig, British Rayon Research Association

STERLING ..... **Booth 419**

Sterling Engineering & Manufacturing Co.
173 Gilligan St., Wilkes-Barre, Pa.

EXHIBITING: Self-stacking boards for handling of bobbins, cones, tubes, quills, etc., made of cadmium-plated and stainless steel; aluminum quill boards and self-stacking tube boards with flexible holder for yarn shrinkage; yarn handling trucks.
PERSONNEL IN BOOTH:
G. McGee, vice-pres.
RESIDING AT: Saxony Motel

STEWART-WARNER ..... **Booth 760**

Stewart-Warner Corp. Alemite Div.
1826 Diversey Parkway, Chicago, Ill.

STORK ..... **Booth 826**

Gebr. Stork & Co.'s Apparatenfabriek N.V.
P. O. Box 3007, Amsterdam, Holland

U. S. AGENT: Cosa Corp., 405 Lexington Ave., New York 17, N. Y.

EXHIBITING FIRST TIME: A model of the "Rope-O-Matic" rope form washing or aftertreatment machine; large photograph of automatic screen printing machine and samples of goods produced with it.

SUPERIOR ..... **Booth 752**

Superior Bolster Co.
319 S. Linwood St., Gastonia, N. C.

SYKES ..... **Booth 402**

Sykes, Inc.
Box 297, Charlotte, N. C.

EXHIBITING FIRST TIME: New types of card clothing.
ALSO SHOWING: Steel wire card clothing.
PERSONNEL IN BOOTH:
C. E. Mason, pres. — B. Whitmire
T. Pogson — J. Lawrence
B. Bentley — H. Moss, Jr.
N. Crowther
RESIDING AT: Dennis Hotel

SVETEMA ..... **Booth 1326**

Svetema
Gothenburg, Sweden

U. S. AGENT. Ernest L. Frankl Associates, 515 Madison Ave., New York 22, N. Y.

EXHIBITING: A laboratory dye padder, complete with control panel; a pad-roll laboratory dye apparatus for pad-roll dyeing method; a pad-roll bleach reaction laboratory unit; one compartment of a counter-current open-width washing machine.
PERSONNEL IN BOOTH:
B. Mellbin — O. Holmgren

TALCOTT ..... **Booth 477**

James Talcott, Inc.
225 Fourth Ave., New York, N. Y.

TATTERSALL & HOLDSWORTH'S ..**Booth 1413**

Tattersall & Holdsworth's
Enschede, Holland

U. S. AGENT. Ernest L. Frankl Associates, 515 Madison Ave., New York 22, N. Y.

EXHIBITING: A laboratory dye jig for dyeing small lots in full width; literature on the "Relax" tensionless cylinder drying machine, complete with operating model of "Relax" drive.

TAYLOR ..... **Booth 635**

Taylor Instrument Companies
95 Ames St., Rochester, N. Y.

EXHIBITING FIRST TIME: The Taylor Relative Humidity Transmitter for the measurement of relative humidity in room or air duct and the transmission of the corresponding proportionate air pressure signal.
ALSO SHOWING: The Sensaire temperature transmitter and the 86K indicating control station; the Transcope pneumatic recorder and indicator, with the various options available, such as the three types of alarm systems, memory pointers, and function gen-

WHAT YOU'LL SEE IN ATLANTIC CITY

erators; the Ful-Flex single case controller applied to control of dyeing cycles; instruments for time-cycle control, including the punched card sequence timer (in operation), the Robotron Timer, and condensation controller or blowdown timer.
PERSONNEL IN BOOTH:
H. Olsen, div. sales mgr.
L. Van Huben, appl. eng.
C. L. Teschner, eng.
J. F. Waples, eng.
G. Zeiters, eng.
R. Branigan, eng.

TENNANT ..... **Booth 1206**
G. H. Tennant Co.
701 N. Lilac Dr., Minneapolis 22, Minn.
EXHIBITING FIRST TIME: The Model 40 electric power sweeper.
ALSO SHOWING: The Model E floor maintenance machine.
PERSONNEL IN BOOTH:
R. Guthrie — O. Hognander
J. Lyon
RESIDING AT: Chalfonte-Haddon Hall

TERRELL ..... **Booth 304**
Terrell Machine Co.
3000 S. Boulevard, Charlotte, N. C.
EXHIBITING FIRST TIME: The Schlafhorst Servoloom Autocopser, an automatic quiller equipped with a fully automatic loading device to feed bobbins into receptacles for the Draper automatic filling magazine; a hydraulically-driven roving bobbin machine for bobbins up to 14" long.
ALSO SHOWING: A Schlafhorst automatic quiller pinboarding quills of continuous filament yarn from individual spindles and boxing quills of woolen and worsted yarns from individual spindles; the Type L loom bobbin cleaning machine.
PERSONNEL IN BOOTH:
W. S. Terrell — R. A. Moore
B. T. Gavin — J. F. Notman
H. Deussen — J. R. Hartmann
M. H. Ridenhour — J. B. Scott
Dr. Reiners, W. Schlafhorst & Co.
H. Ortmann, Schlafhorst
H. Kunkel, Schlafhorst
RESIDING AT: Marborough-Bleinheim

TEXNOVO ..... **Booth 1000**
Texnove S.p.A.
Via Revere 8, Milan, Italy
(See *SNEDEKER*)

TEXPLANT ..... **Booth 1032**
Texplant Corp.
695 Summer St., Stamford, Conn.
EXHIBITING FIRST TIME: The HMG intersecting gill with automatic weight control and can delivery, manufactured by Hanseatische; the "Verilux" luminaire for use in inspection and grading of fabrics, dyeing, shade matching, etc.
PERSONNEL IN BOOTH:
A. J. Lindell, pres.
J. von Ow, asst. to pres.
M. M. Kaye, sales mgr. Verilux
O. Krake, Hanseatische eng.

TEXTILE BULLETIN ..... **Booth 92**
"Textile Bulletin"
218 W. Morehead St., Charlotte, N. C.

TEXTILE ELECTRONICS ..... **Booth 1221**
Textile Electronics, Inc.
2233 Greene St., Charlotte 8, N. C.
EXHIBITING FIRST TIME: The Qualitester, an electronic yarn evaluator; the Qualitex electronic slub catchers, Type Barber-Colman.
ALSO SHOWING: The Qualitex electronic slub catcher.
PERSONNEL IN BOOTH:
H. Glastra, pres.
G. H. Nordholt, tech. mgr.
W. A. Thomason, Jr., sales agent
RESIDING AT: The Empress Motel

TEXTILE INDUSTRIES ..... **Booth 415**
"Textile Industries" magazine
806 Peachtree St., N. E., Atlanta 8, Ga.
EXHIBITING: The May issue of "Textile Industries"; publications which are available as premiums with subscriptions to this monthly magazine, including the recently published "101 Ways to Weave Better Cloth," "Warp Sizing," "The Supervisor and his Responsibilities," "Draper Loom Fixing," and "Dyeing, Bleaching, and Finishing Manual"; reprints of feature articles which have appeared in the magazine; the most recent edition of the "Buyer's Guide" issue; current issue of "Industrias Textiles."

"Textile Industries" continued
PERSONNEL IN BOOTH:
Richard P. Smith, pres.
John C. Cook, vice-pres. & bus. mgr.
George H. Dockray, editor
J. Frank Guest, mng. ed.
Milton C. May, assoc. ed.
Stanley M. Suchecki, assoc. ed.
Jesse W. Ellington, assoc. ed.
Walter M. Mitchell, adv. mgr.
Arthur C. Shaw, bus. rep.
William K. Hoffman, bus rep.
W. Cliff Rutland, bus. rep.
James R. Corgee, bus. rep.
Richard F. Hanrahan, bus. rep.
A. E. C. Smith, bus. rep.
Walter C. Valentine, circ. rep.
Cesar Mota, "Industrias Textiles"
RESIDING AT: Hotel Dennis

TEXTILES PANAMERICANOS ..... **Booth 428**
"Textiles Panamericanos"
570 Seventh Ave., New York 18, N. Y.

TEXTILE WORLD ..... **Booth 406**
"Textile World"
330 W. 42nd St., New York 36, N. Y.

TEXTUBE ..... **Booth 661**
Textube Corp.
695 Summer St., Stamford, Conn.

TEXTURED YARN ..... **Booth 31**
Textured Yarn Co., Inc.
5400 Poplar St., Philadelphia 31, Pa.
EXHIBITING: Information on "Tycora" yarns and textured yarns in general.
PERSONNEL IN BOOTH:
Irving Schwartz, pres.
Ira Schwartz, exec. vice-pres.
C. Weiner, g.m.m.
S. Alexander, dir. mkt. home furn.
R. Stanley, dir. res. & dev.
RESIDING AT: Empress Motel

THEILER ..... **Booths 1040, 1319**
H. J. Theiler Corp.
Ashmont Ave., Whitinsville, Mass.
(See *RUTI and SCHWEITER*)

TITAN ..... **Booth 1227**
A/S Titan
Copenhagen N. Denmark
(See *EDDA*)

TOMLINSONS ..... **Booth 1328**
Tomlinsons (Rochdale) Ltd.
Rochdale, England
U. S. AGENT. Atkinson, Haserick & Co., Inc., Box 509, Framingham, Mass.
EXHIBITING: The "Auto-Zero" Raising (napping) Machine.
PERSONNEL IN BOOTH:
R. R. Clegg — H. H. Pomfret

TORRINGTON ..... **Booth 48**
The Torrington Co., Bearings Div.
59 Field St., Torrington, Conn.
EXHIBITING: Bearings for textile machines; drawn cup needle and roller bearings; heavy duty roller bearings; needle thrust bearings; cam followers.
PERSONNEL IN BOOTH:
D. E. Lewis, gen. mgr.
R. G. O'Connell, sales mgr.
W. J. Candler, asst. sales mgr.
R. H. White, ch. eng.
J. R. Hull, ch. appl. eng.
P. Glazier, prod. eng.
G. Whytlaw, prod. eng.
L. Paine, dist. eng.
J. R. Conboy, dist. eng.

TRUMETER ..... **Booth 714**
Trumeter Co.
38 W. 42nd St., New York 1, N. Y.
EXHIBITING FIRST TIME: Remote controlled and automatic reset counters.
ALSO SHOWING: Entire line of counting and measuring instruments.
PERSONNEL IN BOOTH:
E. Seligman — T. Aydelette
R. Jacobus — T. Huston
RESIDING AT: Ritz-Carlton Hotel

TRUTZSCHLER ..... **Booth 1048**
Trutzschler & Co.
Rheydt-Odenkirchen, Germany
U. S. AGENT. Ernest L. Frankl Associates, 515 Madison Ave., New York 22, N. Y.
EXHIBITING FIRST TIME: A cotton bale plucker and blender for automatic opening and blending of stock from bales; a complete picker line, including condenser, hopper feeder, beater, and lap machine with automatic doffing device, electronically synchronized with pneumatic calender rolls for obtaining 70-lb laps.
PERSONNEL IN BOOTH:
H. Trutzschler, mng. dir.
H. Denckmann, export mgr.
RESIDING AT: Ritz-Carlton

TUBE-TEX ..... **Booth 640**
Tubular Textile Machinery Corp.
33-61 54th St., Woodside 77, N. Y.
EXHIBITING FIRST TIME: A demonstration model of the "Reelax-Jet" dryer for the slack drying of broad woven fabrics, with controls for accurately regulating dryer temperature and fabric moisture content; a horizontal plane folder for high-speed fabric plaiting; a twin V-belt 10 hp varispeed pulley; an inverted steamer; a single-stroke cutter for instantaneous fabric severing; illustrations and displays on the complete line of equipment for finishing and processing of circular knit fabrics.
PERSONNEL IN BOOTH:
E. Cohn — L. Rothenberg, Jr.
D. Foreman — G. L. Bell

TURBO ..... **Booth 809**
Turbo Machine Co.
840 W. Main St., Lansdale, Pa.
EXHIBITING FIRST TIME: A "Cross Shearer" for shearing across looped and cut pile carpets to reduce handling costs and speed carpet finishing; the Beard tubular knit goods calendering machine; a high temperature package dyeing machine.
ALSO SHOWING: A rotary type dyeing machine.
PERSONNEL IN BOOTH:
D. Butterworth, Jr., sales mgr.
J. Stafford, sales eng.
E. Hughes, sales mgr.
W. K. Wyatt, vice-pres.
K. Lendt, agent
A. Bagian, eng. & sales mgr.
J. Emlikian, sales rep.
B. Fuchwanz, sales rep.
J. Santino, tech.
RESIDING AT: Claridge Hotel

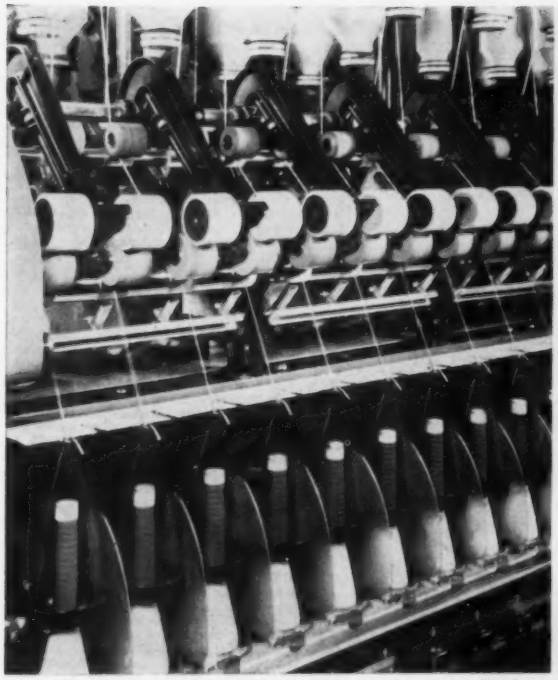
UNISTEL ..... **Booth 47**
The Unistel Textile Machinery Corp.
225 Westchester Ave., Port Chester, N. Y.

U. S. STEEL ..... **Booth 59**
United States Steel Corp.
525 William Penn Place, Pittsburgh 30, Pa.

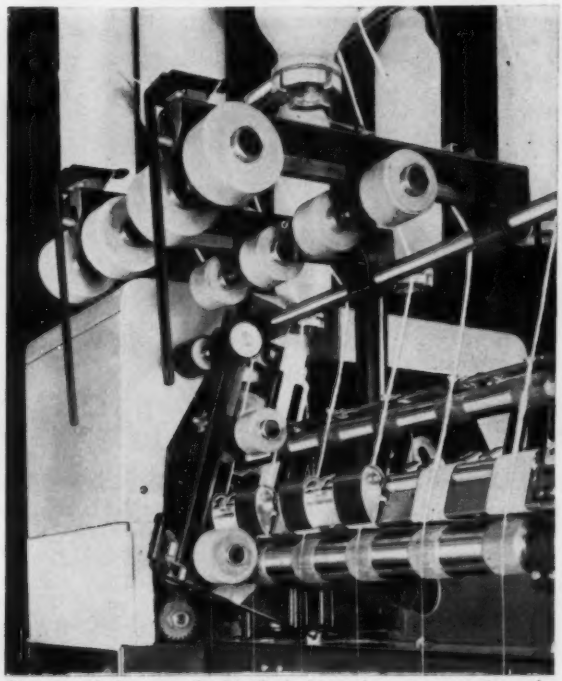
USTER ..... **Booth 765**
Uster Corp.
2516 Wilkinson Blvd., Charlotte 8, N. C.
EXHIBITING FIRST TIME: The "Ustermatic" warp tying machine which ties at rate of 600 knots per min.
ALSO SHOWING: The Uster evenness tester - integrator - Spectrograph; the Model C evenness tester for continuous filament yarns; the automatic single end strength tester; custom tension Recordograph; West Point Cohesion Tester.
PERSONNEL IN BOOTH:
W. B. Floyd, test. equip. mgr.
H. Winiger, mach. dept. mgr.
W. L. Boyd, sales eng.
A. Broccari, sales eng.
V. H. Brockman, sales eng.
B. E. Sweat, sales eng.
J. R. Wright, sales eng.

U. S. TEXTILE ..... **Booth 144**
U. S. Textile Machine Co.
Box 750, Scranton, Pa.
EXHIBITING FIRST TIME: A tube-drive twister specially designed for processing glass yarns; an S-wrap roll doubler-ring twister designed specifically for multiple-end plying of glass yarns; a 2-for-1 cotton twister, draw twister, and coner (Model ESK-½) built by the German firm, Barmer Maschinenfabrik A.G. (Barmag).
ALSO SHOWING: A single spindle "Texturizer"; Marquette roller bearing spindles; McHale molded nylon flyers; belting.
PERSONNEL IN BOOTH:
A. W. Thomas, Jr., pres.
D. W. Scheuer, sec.-treas.
P. J. Thomas, vice-pres. eng.
J. D. Gleitz, vice-pres. mfg.
C. L. Loveland, vice-pres. fibre glass
A. F. Lema, sales eng.
W. P. Russell, sou. rep.
RESIDING AT: Hotel Dennis
E Bestgen, Barmag
H. Schippers, Barmag

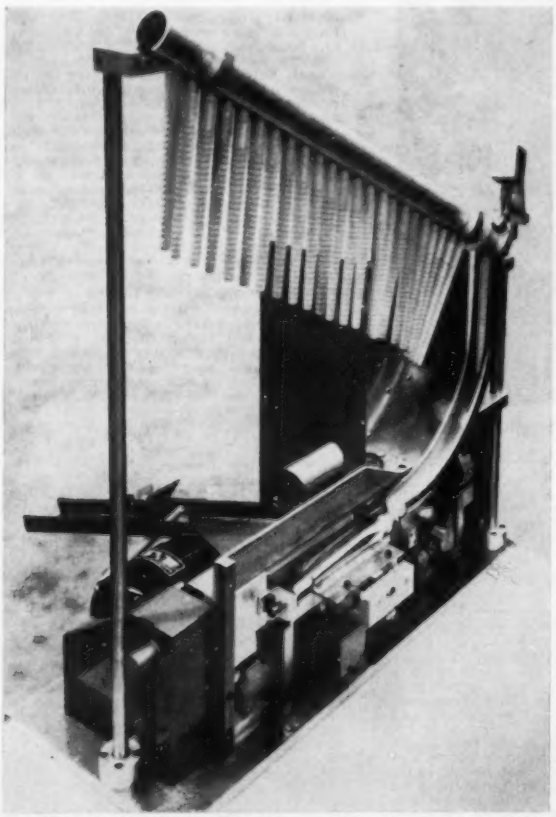
Continued on page 172



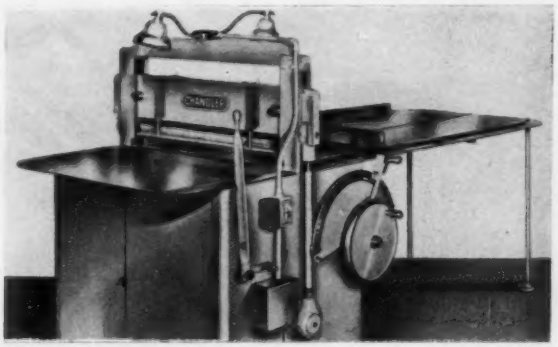
Available for installation on existing spinning frames is the Saco-Lowell SF-4C drafting changeover for spinning worsteds, synthetics, and blends with staple lengths ranging from 1½" to 9". (E-369)



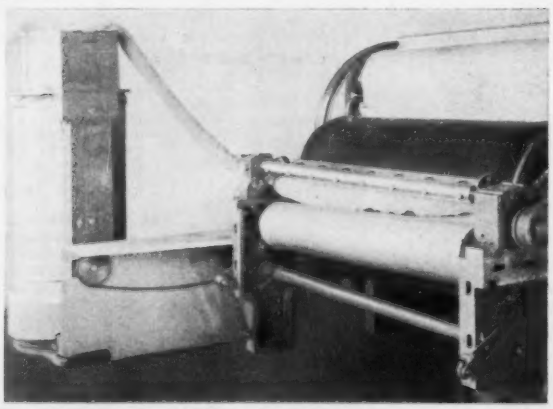
Close-up of the versatile SJ-4C drafting element mounted on the Saco-Lowell SJ long staple spinning frame. Top rolls are raised to show double apron control zone. Drafts over 45 are obtainable. (E-370)



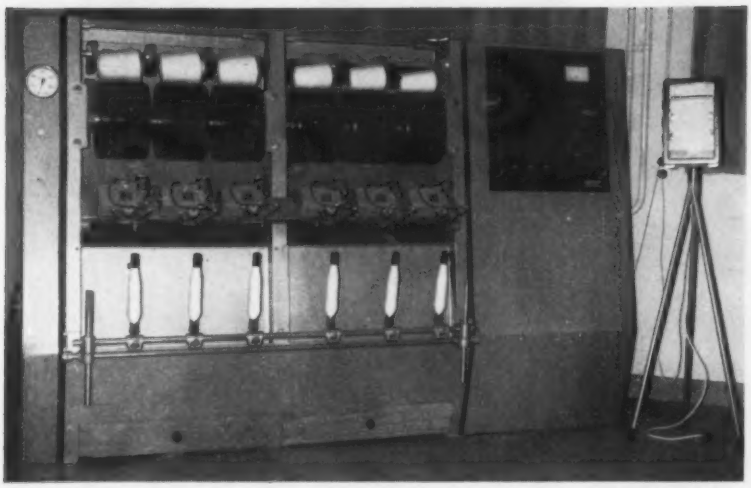
The "Quil-chek" quill runout testing machine developed by West Point Mfg. Co. and manufactured and sold by Custom Scientific Instruments, Inc. Checks runout of 60 quills a minute. (E-371)



For quick preparation of fabric samples for use by sales personnel is this Chandler power-operated swatch-cutting — pinking machine. (E-372)



The Davis & Furber Sliver Card, a two-cylinder machine specially designed for processing man-made fibers up to 3" long and delivering stock in sliver form for use on high pile knitting machines. (E-373)



The "Qualitester" electronic yarn evaluator, as well as "Qualitex" electronic slub catchers, will be in operation in the booth of Textile Electronics. (E-374)

The new Rieter Model GS roving frame has a double-apron drafting system with short top and long bottom aprons, as shown here. (E-375)

U. S. Textile Machine continued

A. Schlabach, Barmag
RESIDING AT: Marlborough-Blenheim Hotel

UTEX ..... **Booth 144**

Utex Div., U. S. Textile Machine Co.
Box 750, Scranton, Pa.
(See *U. S. TEXTILE MACHINE*)

VANDERBURGH ..... **Booth 950**

Vanderburgh & Co., Inc.
11 Broadway, New York, N. Y.

EXHIBITING FIRST TIME: Herzog braiding machines, including a double-head 12-carrier round braider, a double-head 8-carrier square braider, a double-head 12-carrier solid core braider, a double-head 16-carrier round braider, a double-head 25-carrier flat lace braider, an eight-head 16-carrier round braider for making sewing twine for surgical use and fine fishing line, and a heavy rope (1½" to 2") braider; a group drive arrangement for braiding machines.
PERSONNEL IN BOOTH:
A. G. Herzog — R. Weimer
K. G. Richter — H. H. Quell
RESIDING AT: Hotel Dennis

VAN VLAANDEREN ..... **Booth 586**

Van Vlaanderen Machine Co.
370 Straight St., Paterson 3, N. J.

EXHIBITING FIRST TIME: A heavy duty high speed tenter frame with a cast iron lathe type bed, bevel gear main drive housings, and improved cross stand nut and screw opening and closing device.
ALSO SHOWING: A heavy duty, constant speed, automatic dye jig to accommodate a 36" dia. batch roll (with 5 hp motor for either tensionless or tension operation); a combination examining and tubing machine equipped to examine large diameter batch rolls, with edge guiding on tubing arrangement; heavy duty 10-ton, 2-roll pneumatic padding machine with variable speed drive and chain-driven, air-operated slip disk take-up.

VEEDER-ROOT ..... **Booth 296**

Veeder-Root, Inc.
70 Sargent St., Hartford 2, Conn.

EXHIBITING FIRST TIME: Line of electronic "Count-Paks" and predetermining counters which offer new precision.
ALSO SHOWING: Single, double, and triple pick and hank counters for looms and preparatory equipment; predetermining counters for yardage control and yardage counters for inspection equipment; the "Vary-Tally" for inspection and quality control applications.
PERSONNEL IN BOOTH:
F. J. Swords, east. sales mgr.
R. C. Conant, dist. mgr.
H. B. Huff, dist. eng.
J. J. Simons, dist. eng.
J. H. Yost, dist. eng.
T. Nelson, west. sales mgr.
A. E. Kallinich, vice-pres.
G. H. Anthony, chmn. exec. comm.
RESIDING AT: Shelburne Hotel

VERDOL ..... **Booth 1**

Societe des Mecaniques Verdol
16 rue Dumont d'Urville, Lyon, France
(See *BAXTER*)

WAK ..... **Booth 1539**

WAK Industries
1814 S. Tryon St., Charlotte, N. C.

EXHIBITING FIRST TIME: A stretch indicator; double wheel yardage pulser for remote indication of yardage.
ALSO SHOWING: Double wheel yardage counters; sub-total and total yardage counters; roll-driven yardage counters; pick and hank counters; magnetic and ratchet counters.
PERSONNEL IN BOOTH:
J. H. Dougherty, vice-pres.
J. L. Cole, sec. & treas.

WALTON ..... **Booth 284**

Walton Laboratories, Inc.
1186 Grove St., Irvington 11, N. J.

EXHIBITING FIRST TIME: Humidifiers for use on or within an air duct; air filter to protect Walton atomizing space type humidifiers against dust.
ALSO SHOWING: Humidifying units which are completely automatic after connection to a small water feed line and a light duty wiring circuit, including space or duct models for spot humidification, or as a booster to existing systems, or as a completely automatic independent system.
PERSONNEL IN BOOTH:
J. B. Feldermann — F. Hartwell
J. R. Lewis — A. J. Janks
G. Lyons

WARNER & SWASEY ..... **Booth 327**

The Warner & Swasey Co.
5701 Carnegie Ave., Cleveland 3, Ohio

EXHIBITING FIRST TIME: "Pin Drafters" featuring automatic doffing, an infeed leveling device ("Servo-Drafter"), and a newly designed free standing can coiler able to accommodate 18", 20", and 24" x 42" cans.
ALSO SHOWING: The "Whirlwind" Twister-Winder processing nylon and polyethylene; the "Pacific" Converter.
PERSONNEL IN BOOTH:
H. P. Balsom, dist. mgr.
A. F. Barney, adv. mgr.
L. M. Cole, sales vice-pres.
H. B. Hunter
H. K. Jennings, dist. mgr.
R. O. Perrault, br. mgr.
G. M. Phoenix, br. mgr.
S. Taylor, receptionist
T. L. Stilwell, sales mgr.
R. Whewell, ser. mgr.
RESIDING AT: Hotel Claridge

WARREN ENGINEERING ..... **Booth 1046**

Warren Engineering Co.
Broadway, N. Y.

EXHIBITING FIRST TIME: The new Warren-Wynn diaphragm split-body, straight-through valves; control valves; pressure reducing valves; and electrically operated valves.
PERSONNEL IN BOOTH:
T. P. Bruno
M. Wurzer
G. Breece

WATSON-WILLIAMS ..... **Booth 672**

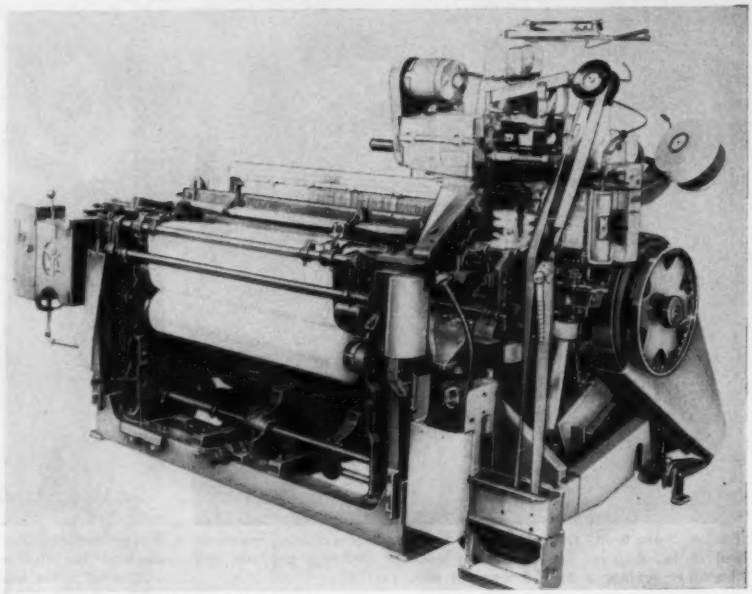
Watson-Williams Mfg. Co.
Millbury, Mass.

EXHIBITING FIRST TIME: "Wahide"

full thickness shuttles for long wear in automatic looms.
ALSO SHOWING: The full line of shuttles; Emil Adolff paper tubes, quills, bobbins, and cones.
PERSONNEL IN BOOTH:
H. J. Watson, treas.
J. K. Watson, vice-pres.
H. S. Pellatt, rep.
S. M. Ebert, rep.
J. Wyatt, rep.
R. Patten, rep.
R. A. Norman, rep.
Representatives of Watson & Desmond

WERNER MACHINE .....**Booth 135**
Werner Machine Co., Inc.
183 Autumn St., Passaic, N. J.
EXHIBITING FIRST TIME: A heavy duty double removable beam jig for large diameter rolls; a combination tuber and examining machine featuring all-automatic edge guiding on movable carriage, variable speed control, clutch operated; a continuous two-roll batcher featuring new air-operated drive, automatic transfer, dual interlock tensionless safety system, and patented pin bar attachment for cutting of heavy poplins and gabardines without the use and expense of rotary cutters; air-controlled friction wind-up unit with built-in air fan, chain driven, which can be used as a clutch, variable speed drive or overdriven friction windup; three-roll rolling tension unit for uniform tension control of open width fabric.
ALSO SHOWING: Aluminum tension brakes with removable brake inserts; cloth oscillator which is self-propelled by cloth travel for preventing selvage build-up; automatic slot sealers for vacuum-operated suction slots that prevent short-circuiting of slot and assure maximum extraction; air-control systems for loads of 5 to 30 tons in either single or double control panels; rotary slat expanders and curved rubber expanders for crease prevention in fabrics and film; universal print machine fitting gear featuring easily changed spur gears for varying size copper shells.
PERSONNEL IN BOOTH:
W. P. Rose — A. R. Gessinger
P. F. Rose — R. E. Kuhn
RESIDING AT: Hotel Dennis

WERNER CONSULTANTS .....**Booth 612**
Werner Textile Consultants
1430 Broadway, New York 18, N. Y.
EXHIBITING: Charts, panels, and three-dimensional displays highlighting some case histories of successfully completed assignments in the areas of quality control, cost reduction, process control, inventory control, machine layout, and materials handling; studies on textile distribution, fabric development, market analysis, and sales organization; paper work simplification, data processing, and administrative controls; supervisory training, plant, community and human relations programs; management organization, long range planning, and mill consolidation.
PERSONNEL IN BOOTH:
H. L. Werner — J. P. Mills
R. M. Ashner — C. W. Bendigo
J. C. Werner

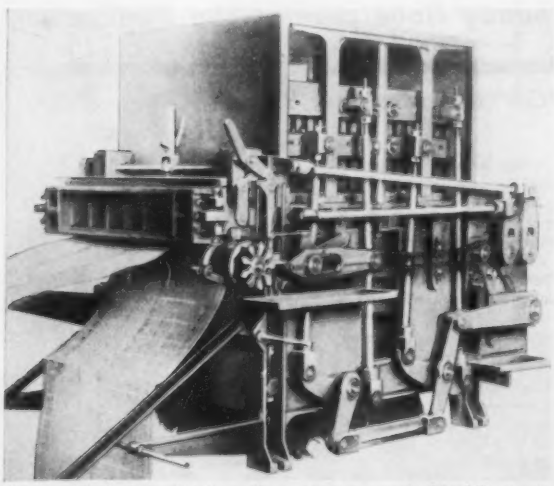


The Northrop high-speed, single-shuttle loom equipped with the "Unifil" loom winder may be seen in the British Northrop exhibit. (E-376)

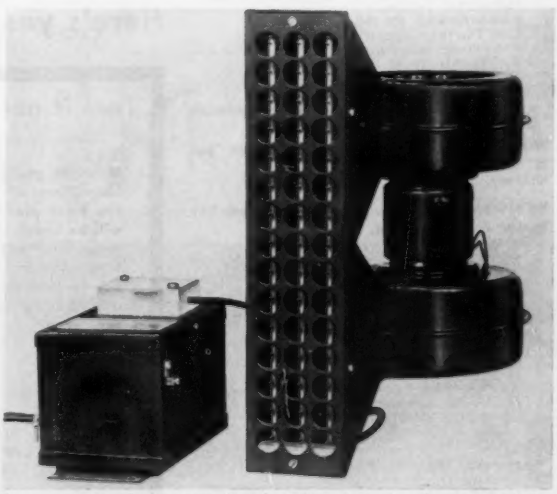
WESTINGHOUSE .....**Booth 102**
Westinghouse Electric Corp.
3 Gateway Center, Pittsburgh, Pa.
EXHIBITING: Variable speed drives; motors; and motor controls.
PERSONNEL IN BOOTH:
F. T. Benner, in charge

WEST POINT FOUNDRY .....**Booth 1534**
West Point Foundry & Machine Co.
West Point, Ga.

WHITIN .....**Booths 212, 216, 1153**
Whitin Machine Works
Whitinsville, Mass.
EXHIBITING FIRST TIME: An entirely new 14" x 7" roving frame featuring flyer speeds up to 1000 rpm, production of more uniform roving, and maximum bobbin weights; the Whitin American worsted comber, a six-head machine which resembles the Super J cotton comber in combing function and runs at 125 nips per min to produce approximately 70 lb per hr; the Model KW American System Piedmont spinning frame; the new "Flex-Spin" wool spinning frame offering up to 16" traverse, reciprocating ring and spindle rail motion, single balloon control ring, and variable speed drive (optional); the "Super Lap" machine for preparation of comber laps; the "Pacemaker" P3 twister with straight line yarn delivery path and many other features for production of low twist filament yarns; the "Commodore" twister, a heavy duty, 10" gauge, 8" ring machine especially suited for high production of knotless yarn for the tire cord industry; the "Standard" spinning frame (in Booth 11 occupied by Bahnson Co.); the Whitin-ARCT False



The Verdol Antares "250" endless paper tape, double lift, single cylinder Jacquard which is to be shown by Baxter Corp. (E-377)



For areas in which conventional static eliminator bars cannot be used in this Simco "Aerostat Blower Ionizer." (E-378)

Two of these Sant' Andrea Model PS rectilinear combing machines will be on display, one processing wool at 160 nips per min and the other synthetics at 175 nips per min. (E-379)

Electromagnetic control of the harnesses is the outstanding feature claimed for this sample weaving loom which visitors may see operating in the booth of Sample Weaving Machine Co. (E-380)

Twist Machine (in Booth 1153) for processing thermoplastic yarns of the stretch, crimp, or torque type.
ALSO SHOWING: The "Piedmont" cotton system spinning frame; the Super J comber with several design changes, including overarm weighting and antifriction top rolls in draw box and a new half lap; and a four-delivery "Even-Draft" drawing frame which has been improved to provide speeds up to 600 fpm on carded work and 450 on combed.
PERSONNEL IN BOOTH:
Sales personnel from all of the company's domestic branches and representatives from a number of overseas Whitin offices.
RESIDING AT: Hotel Shelburne

WILSON & LONGBOTTOM ..... **Booth 1432**

Wilson & Longbottom Ltd.
Nelson Foundry, Barnsley, Yorkshire, England
U. S. AGENT: International Sales Management Co., 123 N. Poplar St., Charlotte, N. C.

EXHIBITING FIRST TIME: A 27" face-to-face double shuttle Wilton carpet loom which is manufactured in all widths up to 15' and provides high production of Wilton and velvet carpets; a precision centerless cop winding machine which produces high density cops for weaving of carpets and heavy industrial fabrics.
PERSONNEL IN BOOTH:
I. S. Porter, tech. dir.
J. Cornall, sales mgr.
R. Thomis, tech.
F. Salter, tech.
P. R. Petersen, U. S. agent.
RESIDING AT: Marlborough-Blenheim Hotel

WINDLE ..... **Booth 348**

W. W. Windle Co.
Millbury, Mass.

WINSOR & JERAULD ..... **Booth 187**

Winsor E Jeraiuld Mfg. Co.
1268 Eddy St., Providence, R. I.

EXHIBITING FIRST TIME: A heavy duty, wide rail, high speed tenter frame (T-5), equipped with W&J patented high speed roller clips.
ALSO SHOWING: A complete line of tenter clips.
PERSONNEL IN BOOTH:
E. Wharmby, gen. mgr.
C. C. Keyworth, sales rep.
A. Cole, mgr.
M. M. Zuck, exec. vice-pres.
RESIDING AT: Empress Motel

WOONSOCKET ..... **Booth 1052**

Woonsocket Napping Machinery Co.
355 Orchard St., Woonsocket, R. I.

EXHIBITING FIRST TIME: A high-speed napping machine for all types of knitted fabrics.

Woonsocket continued

ALSO SHOWING: A double-action napping machine.
PERSONNEL IN BOOTH:
A. McGoldrick, pres.
T. O'Hara, exec. vice-pres.
P. Malay, treas.
W. McGoldrick, vice-pres.
W. Pouliot, eng. dept.
R. Heroux, eng. dept.

WOLTERS ..... **Booth 408**

Peter Wolters, Kratzenfabrik & Maschinenfabrik G.m.b.H
Mettman/Rhld., Germany
(See *ROY*)

WOOLART ..... **Booth 1318**

Woolart Mills, Inc.
419 Park Ave. South, New York 16, N. Y.

EXHIBITING FIRST TIME: The Heinz Hergert "Pol-Rotor" for imparting a lustrous finish and soft, silky hand to high pile (imitation fur) fabrics electrifying high pile (imitation fur) fabrics and for use as a finishing machine to upgrade women's wear woolens by imparting a lustrous finish and soft, silky hand.

Woolart continued

PERSONNEL IN BOOTH:
F. H. Kloeckener, pres.
A. Lueder, vice-pres.
H. Hergert, pres. Heinz Hergert

YEOMANS ..... **Booth 935**

Yeomans Textile Machinery Co.
P. O. Box 1661, Spartanburg, S. C.

EXHIBITING FIRST TIME: The Scharer pineapple cone winder for winding nylon, etc.
ALSO SHOWING: A Scharer automatic filling winder with pinboard stacking device for filament yarns; a Scharer automatic winder for cotton yarns; a Scharer automatic winder for woolen yarns.
PERSONNEL IN BOOTH:
C. L. Yeomans, pres.
C. H. Turner, treas.
J. Scharer, prop. Scharer
M. Jent, sales eng. Scharer
K. Laager, tech. Scharer
O. Zollinger, tech. Scharer
RESIDING AT: Shelburne Hotel

ZEFFNER ..... **Booth 1538**

Alfred Zeffner & Co.
Weiner Strabe 28, Hannover D, Germany

Here's your handy floor plan of the Auditorium

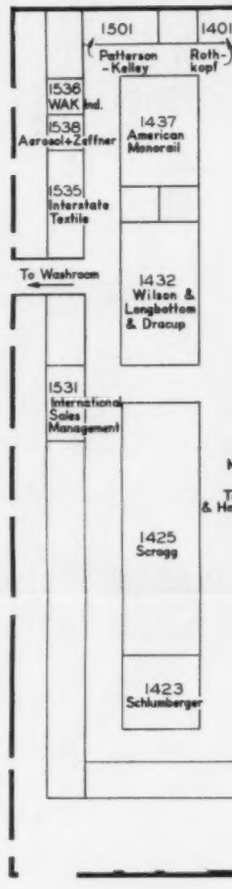
Tear it out NOW and take it with you to Atlantic City

■ When you find in this preview of the Show items of special interest, circle on the floor plan the booths in which they will be found. Upon reaching the Auditorium, visit those booths first, using the floor plan to save time in locating them. The remainder of your day will then be available for browsing the entire exhibition area.

IT'S EASY to find a particular supplier. Locate his name in the alphabetical listing on the folder, note his booth number, and then find that number on the floor plan. Note that Booths 1-765 are on the Boardwalk Level, while Booths 800-1540 are on the Lower or Street Level.

Lower Level and Lis

FIRM	BOOTH
Abbott	84
Abington	240
Abney Mills	1229
Aerosol	1538
Alemite	760
Allen-Bradley	404
Allen Warper	274
Allentown Bobbin	654
Allgauer (Saco-Lowell)	99, 482
Allied Chemical	36
Allis-Chalmers	66
"American Dyestuff Reporter"	758
American Lava	418
American Moistening	51
American MonoRail	1437
American Rieter	5, 19
"America's Textile Reporter"	302
Anderson Machine	551
Arbach	823
Armstrong Machine	394
Ashworth	669
Atkinson, Haserick	818
W. H. Bagshaw	63
Bahnson	11
Barber-Colman	112, 434, 450
Barco	382
Barmag (U. S. Textile Mach.)	144
Baxter	1
Edw. S. Beard	702
Birch Bros.	466
J. Bishop	709
Bonas Bros.	800
Benjamin Booth	390
Briggs-Shaffner	644
British Northrop	842
Bunting Brass	81
Fritz Buser (Jungfrau)	1208
H. W. Butterworth	621
"Canadian Textile Journal"	753
Callebaut-De Blicquy	853
Carding Specialists	818
Cardpen (Abington)	240
Carniti (Stellamcor)	1336
Carolina Fiberglass	1205
A. B. Carter	39
Chandler Machine	326
Chemstrand	71
C. I. T. Corp.	1218
Clark-Cutler-McDermott	288
Clark Door	58
Cleveland Worm & Gear (Eaton)	298
Clinton Corn	62
Coats & Clark	417
Cocker Machine	615
Cole Engineering (A. B. Carter)	39
Collins Bros.	8
Cook Machine (Riggs & Lombard)	266
Corn Products	295
Cosa Corp.	824
Cotton-McCauley	118
"Cotton Trade Journal"	755
Courtaulds	33
Crabtree	1200
Crompton & Knowles	360
Croon & Lucke	924
Curlator	278
Curtis & Marble	157
Custom Scientific	476
Cutler-Hammer	80
"Daily News Record"	395
Davidson-Kennedy (Saco-Lowell)	482
Davidson, MacGregor	1139
Davis & Furber	527
Davison Publishing Co.	424
Dean Products	123
Deering Milliken	124
Delerue (Interstate)	1535
Diehl Mfg.	289
Dixon Corp.	76
Samuel Dracup	1432
Draper Corp.	115, 439, 455
Dudley, Garland & Jensen	757
Duesberg-Bosson	703, 1132
Du Pont	1235, 1304
La Duranitre	803
Durant Mfg.	292
Dynamatic (Eaton)	298
Eaton Mfg.	298
Edda International	1227
Frank Egan	751
Electric Regulator	385
Engineered Plastics	301
Erhardt & Leimer	821
Extremultus	388
Fabrionics	18A
Fafnir Bearings	282
Famatex	1331
Farmingdale	717
Farval (Eaton)	298
Fawcett & Preston (Int. Sales)	1531
Fife Mfg.	655
Fleissner (Saco-Lowell)	99, 482
Fletcher Works	547
Forte Engineering	37
Foster Machine	649
Foxboro	399
Ernest Franki	1324
G. P. E. Controls	750
Gabb Special Products	710
Gaston County Dyeing	638
General Dispersions (Gen. Plastics)	1216
General Electric	410
General Plastics	1216
General Radio	710A
David Gessner	246
Gilbos	854
George Goulston	642
Grinnell Corp.	51
Thomas Halton	711
Hanseatische	1032
Harnisch (Lenkotex)	663
Hayes Industries	413
Hayssen Mfg.	474
Heany Ceramics	7
J. Hengstler	929
Henriksen (Edda)	1227
Hergert (Woolart)	1318
Herr Mfg.	69
Herzog	950
Hobbs Mfg.	552
Hobourn (Deering Milliken)	124
Holdsworth	171
R. H. Hood	350
Houget	857
Howard Bros.	379
Hudson Machine	41
Rodney Hunt	191
James Hunter	120, 252
Hyatt Bearings	275
Industrial Dryer	680
"Industrias Textiles"	415
International Sales Management	1531
Interstate Textile Equip.	1535
Jakob Jaeggli	1411
Johnson Corp.	393
Johnson Service	88
Jomac	43
"Journal of Commerce"	807
Jungfrau	1208
Albert Jurgens	820
Kanegafuchi (Rudnick)	1148
Kearny Mfg.	342
Kennett Equipment	11A
William Kenyon	79
Kettling & Braun	836
Kidde Textile Mach'y	478
Kirkman & Dixon (Reed)	277
Klauder Weldon Giles	707
Kluttz Rings	754
Knotex	900
Eduard Kusters	846
W. T. Lane & Bros.	387
Lansdowne Steel	715
Lebocey Needle (Rothkopf)	1401
Leesona Corp.	197
Lenkotex	663
Lestershire Spool (National Vulcanized Fibre)	1231
Lincoln Engineering	307
Lindly & Co. (Foster)	649
Link-Belt	94
H. F. Livermore	322
Lockwood Greene	86
Maag (Trumeter)	714
Macbeth Daylighting	389
Machinecraft (Cotton-McCauley	118
Robert A. Main	679
Mann (Lenkotex)	663
Marlin-Rockwell	606
Marshall & Williams	559
Matrix Controls	294
Maxbo (Edda)	1227
Mayer (Lenkotex)	663
Edward J. McBride	1152
Medley Mfg. (SACM)	940, 844
Mettler Instrument	381
Mettler's Sons	839
Mezzera	1412
Mill Devices (Carter)	39
Milton Machine	386
Minneapolis-Honeywell	286
Mitsubishi International	1034
Mitsui	931
"Modern Textiles Magazine"	306
Morrison Machine	507
Mount Hope Machinery	426
Jakob Mueller	1325
Franz Muller	1037
National Drying Mach'y	74
National Ring Traveler	89
National Starch Products	713
National Vulcanized Fibre	1231
New Departure	127
Newmark (Stellamcor)	1336
Nippon Spindle (Rudnick)	1148
John P. Nissen	759
Norcross Corp.	469
North American Mfg.	1402
N. C. State School of Textiles	1100
O-M Spinning (Rudnick)	1148
Paramount Textile Mach'y	1145
Edward Parkinson Mfg.	609
Parks-Cramer	564
Parks & Woolson (Riggs & Lombard)	266
Parrott & Ballentine (Franz Muller)	1037
Patterson-Kelley	1501
Penick & Ford	632
B. F. Perkins	163
Picanol	952
Platt Bros.	943, 818, 171
Plutte, Koecke	948
Pneumafil	761
Portland Co.	89A
Presin Co.	65
Proctor & Schwartz	579
Qualitex	1221
Raxhon	851
Robert Reed	277
Robert Reiner 1305, 1331, 1339	
Republic Steel	676
Rhodia	35
Rieter (American Rieter)	5, 19
Riggs & Lombard	266
Roannais	1054
Roberts Co.	344
Mac M. Rothkopf	1401
Rothschild (Fabrionics)	18A
B. S. Roy	408



Board

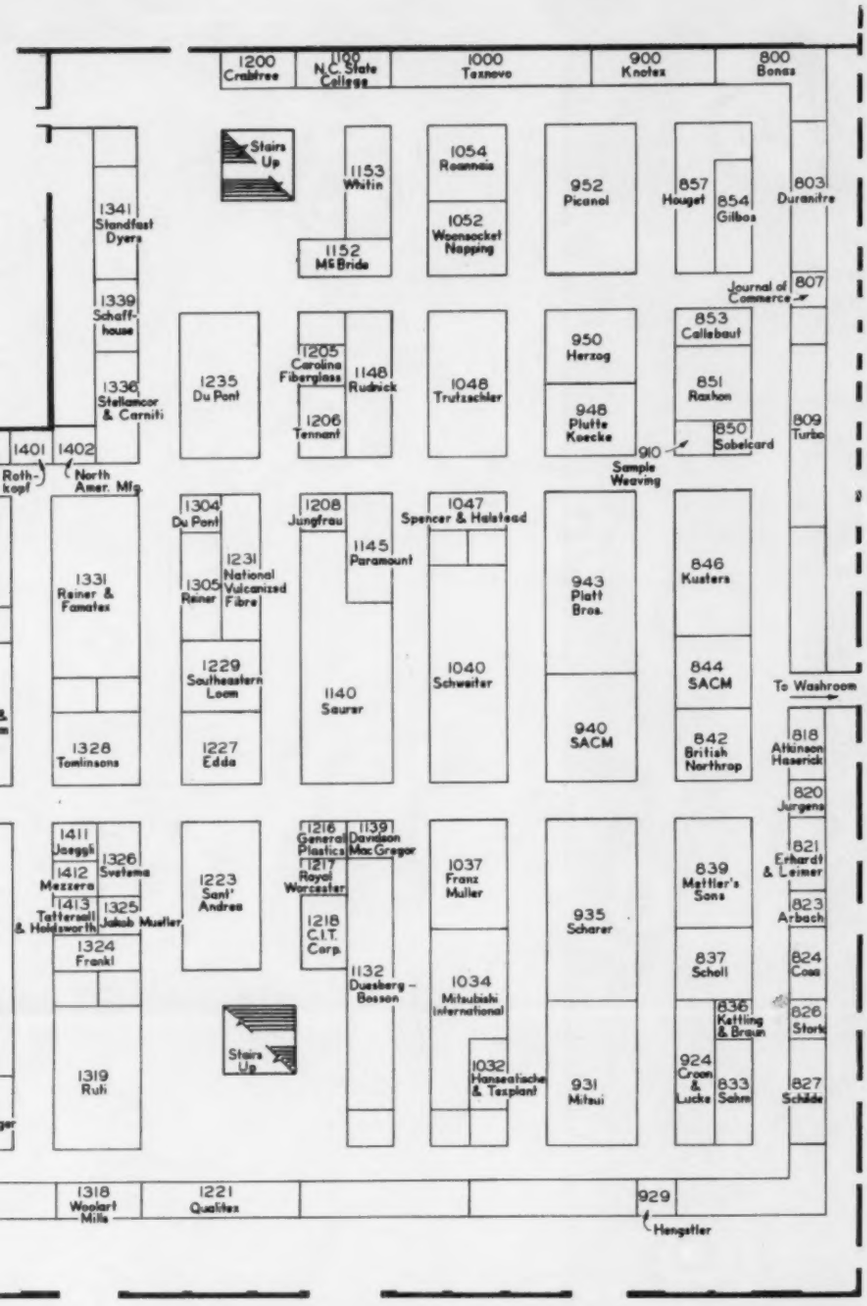
FIRM	BOOTH
Royal Worcester Ceramics	1217
Rudel Mach'y	378
Edward Rudnick	1148
Ruti Machinery	1319
Saccardo (Lenkotex)	663
SACM	940, 844
Saco-Lowell	99, 482
Saentis (Saurer)	1140
Georg Sahm	833
Sample Weaving	910
Sant' Andrea Novara	1223
C. G. Sargent's Sons	470
Adolph Saurer	1140
Schaffhouse	1339
Scharer	935
Schilde	827
N. Schlumberger	1423
Schmidt Mfg.	646
Scholl	837
Schweiter	1040
Scott Testers	553
Ernest Scragg	1425
Seydel-Woolley	57
Sharples Corp.	9
Sheffield Corp.	384
Simco Co.	610

1960 American Textile

Auditorium—Atlantic C

azine, tear along this line

List of All Exhibitors



BOOTHS 800—1540

ardwalk level, Booths 1—765, on other side

FIRM	BOOTH
Sjostrom Machine	659
S K F Industries	29
James Smith (Hood)	350
Snedeker (Texnovo)	1000
Soabar	10
Sobelcard	850
Sonoco Products	82
Southeastern Loom	1229
"Southern Textile News"	701
Spaulding Fibre Co.	397
Morris Speizman (Interstate)	1535
Spencer & Halstead	1047
Spintex (Lenkotex)	663
SRRL ("Cotton Trade Journal")	755
Standfast Dyers	1341
A. E. Staley Mfg.	165
Steel Heddle Mfg.	420
Steele Canvas Basket	293
Stellamcor	1336
Sterling Engineering	419
Stewart-Warner (Alemite)	760
Stork	826
Superior Bolster	752
Sykes, Inc.	402
Svetema	1326
James Talcott	477
Tattersall & Holdsworth's	1413
Taylor Instrument	635
G. H. Tennant	1206
Terrell Machine	304
Texnovo	1000
Texplant Corp.	1032
"Textile Bulletin"	92
Textile Electronics (Qualitex)	1221
"Textile Industries"	415
"Textiles Panamericanos"	428
"Textile World"	406
Textube Corp.	661
Textured Yarn	31
Theiler (Ruti & Schweiter)	1040, 1319
Titan (Edda)	1227
Tomlinsons	1328
Torrington	48
Trumeter	714
Trutzchler	1048
Tubular Textile Mach'y	640
Turbo Machine	809
Unistel Textile Mach'y	47
U. S. Steel	59
Uster Corp.	765
U. S. Textile Machine	144
Utex (U. S. Textile Mach.)	144
Vanderburgh (Herzog)	950
Van Vlaanderen	586
Veeder-Root	296
Verdol (Baxter)	1
WAK Industries	1539
Walton Laboratories	284
Warner & Swasey	327
Watson-Williams Mfg.	672
Werner Machine	135
Werner Consultants	612
Westinghouse Electric	102
Whitin Machine 212, 216,	1153
Wilson & Longbottom	1432
W. W. Windle	348
Winsor & Jerauld	107
Woonsocket Napping	1052
Wolters (Roy)	408
Woolart Mills	1318
Yeomans (Scharer)	935
Alfred Zeffner	1538

le Machinery Exhibition

City, N. J.—May 23-27

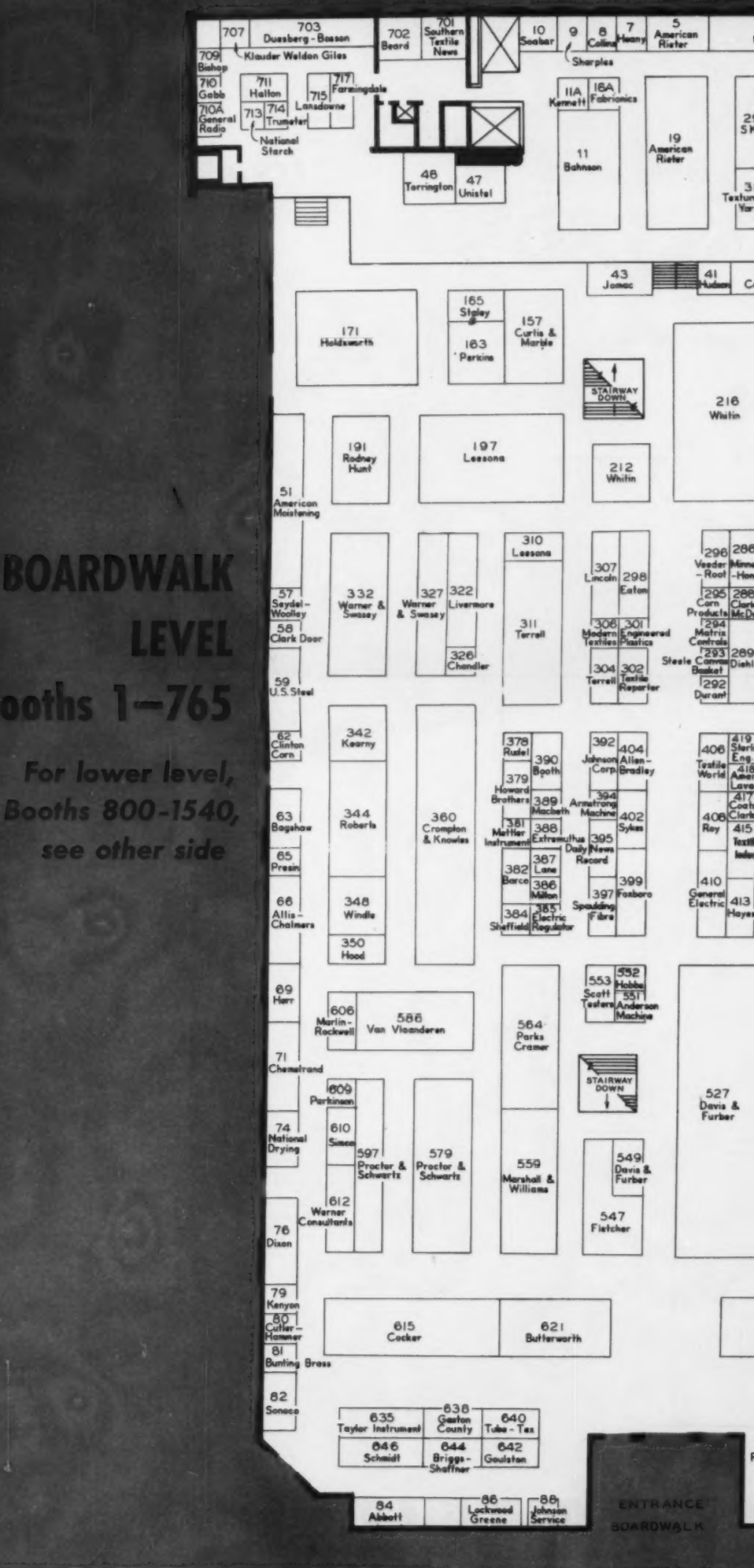
Textile Industries' DIRECT

1960 American Textile M

Auditorium — Atlantic City

BOARDWALK LEVEL Booths 1—765

For lower level, Booths 800-1540, see other side



TORY OF EXHIBITORS

Machinery Exhibition

y, N. J. — May 23-27

BOARDWALK LEVEL

Booths 1–765

For lower level, Booths 800-1540, see other side

Old spinning frames had to be removed to make way for the new ones.

When moved to the mill yard they made a mountain of scrap.

PLANNING MODERNIZATION?

This large cotton mill was completely rejuvenated without loss of production

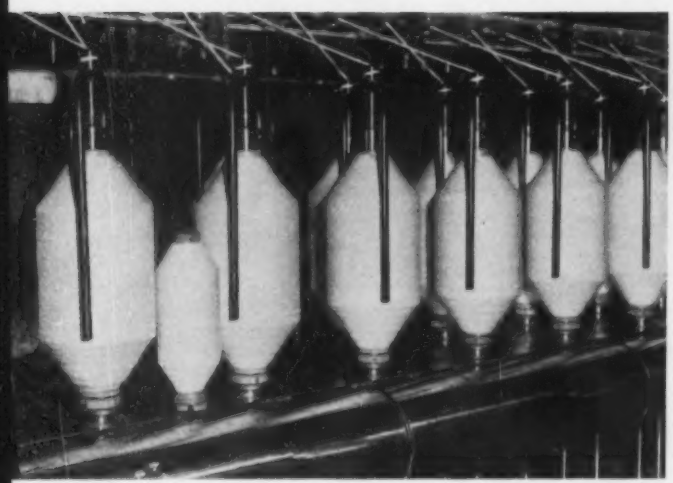
● *Changing an old department into a new one often introduces a chain of events which seems to lead from one department to another, stopping only when the entire mill is renovated. The introduction of large-package Gwaltney spinning in this instance fostered changes in spooling, warping, slashing, and weaving.*

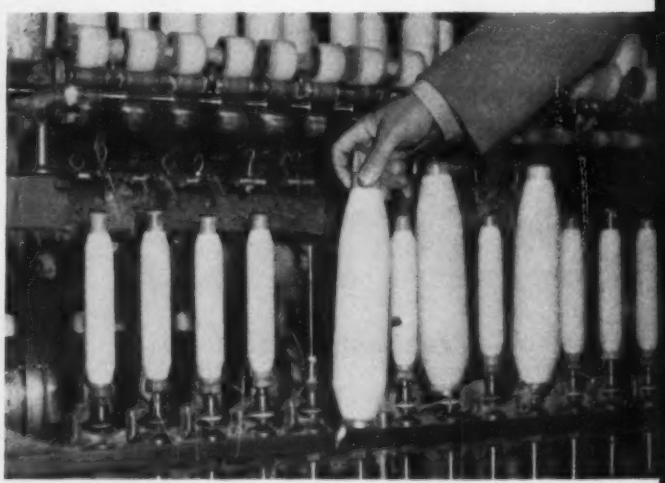
by a Mill Superintendent
Exclusive

OUR MODERNIZATION program started when we rebuilt our opening and picking facilities. We did this thoroughly, and since then we have needed only to substitute a filter system for the dust pit, add pneumatic lap racks to our pickers, and otherwise keep the machinery maintained in good shape. Not enough technological changes have occurred in these de-

The 144 deliveries of 3-over-4 drawing, the eight lap winders, and 15 12" x 6" slubbers were installed without production loss.

Again without loss of production, the 143 Gwaltney spinning frames, with Shaw drafting, were set in place and started.





We soon began to feel the difference the larger roving and spinning packages made in our costs. We now doff spinning in drums.

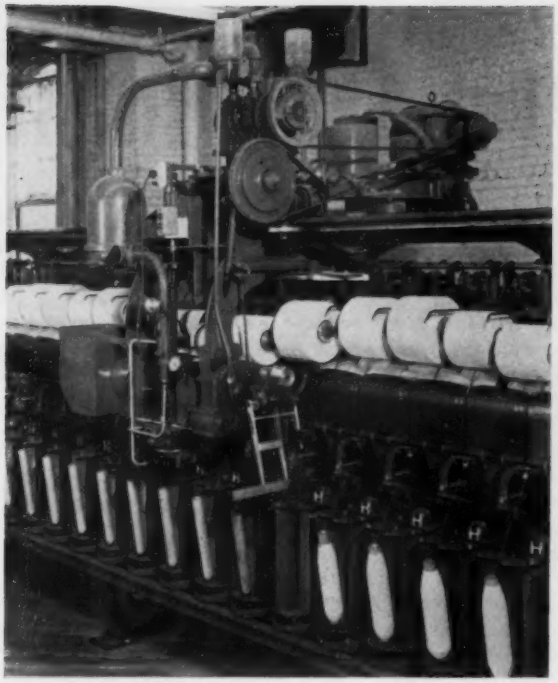
partments in the interim to justify wholesale changes.

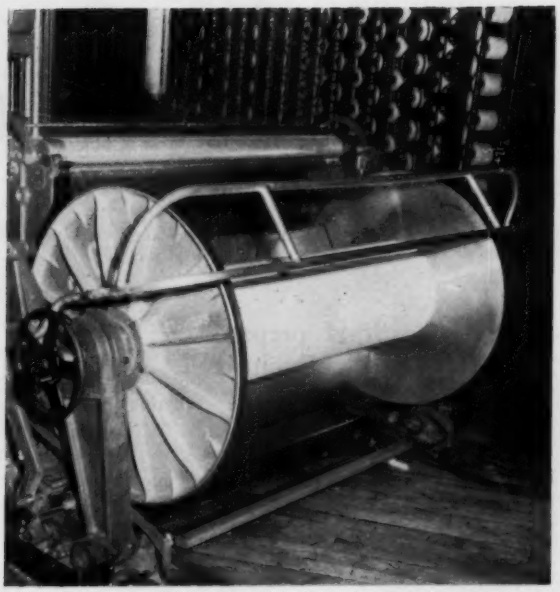
In the other parts of the mill the story was quite different. In the card room we saw fit to change all our old model cards to a five-point setting system. We added 28 new cards to help even out the mill balance.

When the issue of larger card cans was introduced we struck a balance with the 14" x 36" can. To have gone to a larger size would have entailed moving almost all our cards to the sacrifice of needed floor space. The benefits were not worth the expense.

Installation of eight lap winding machines and 144 deliveries of 3-over-4 drawing were completed routinely without interfering with production. The same is true of the fifteen 12" x 6" slubbers and the 143 Gwaltney spinning frames with Shaw drafting systems.

The 240-spindle frames brought on a few problems we had not anticipated. The running time on the large package spinning had to be adjusted to the knots per minute of our spoolers. We worked out and instituted a planned doffing system which is working to our





With the Type "D" spooler (left) it was possible for us to spool more than one count at a time on the same machine. Spinning doffing time was tailored to fit the spooler's cycle time. The 38" aluminum warper beams (above) now being used hold three cheeses of yarn per end and leave adequate yarn on starters.

satisfaction.

Once the package sizes at the spinning frames and at the spoolers had been reconciled, the same problem turned up at the warpers.

If it were possible to lay out a plant on a single yarn count, using equipment from a single manufacturer (which usually is impossible) it would be relatively simple to sit in the office and plan the last detail of a changeover and expect it to work out as planned. This not being the case, it is necessary to tackle each problem as it turns up and at the place where it turns up. It can scarcely be done from the office chair.

In selecting the size of the section beam, which should be a multiple of the cheese run on the spooler, we at first experimented with a 36" beam. It turned out that a 36" beam would hold two cheeses but not quite three. The "starter" left would have been too large—so large, in fact, that the running time of the cheeses would have been reduced so much that additional spooler tenders would have been necessary.

Furthermore the shorter yardage on the section beam would have meant increased labor costs at the warper, increased job loads for the warper tender, beam man, and slasher tender; and additional waste at slashing and spooling. We modified our warpers to accommodate a beam of 38" head, which solved all those problems simultaneously.

The change to larger packages brings on a costly situation of increased inventory. We have tailored our thinking to that new item; but we also have bent every effort to keep inventories to an absolute minimum. Planning must be done more accurately and to greater lengths than we formerly found necessary. An uninterrupted flow of material is absolutely necessary in a system of minimum inventory. We are accustomed to that now.

Extra floor space is necessary. Although the Gwaltney frame permits added production without added floor space, the functions supporting the larger packages, as a rule, cannot be carried out in the original space.

For instance: We doff each side of the Gwaltney frames into a 55-gal drum. The doff fills two drums which must be kept some place until they are emptied for winding or spooling.

The higher cost of the bobbins, spools, etc., makes it mandatory to keep inventories of those supplies down to an acceptable level. Breakage of those parts is a far more expensive item than we formerly knew.

Planning never ceases with us. The more of it we do the more avenues we uncover. As the modernization now stands, we have:

1. Completely air conditioned carding and spinning departments;
2. Installed individual drives on all cards;
3. Replaced old model warpers with new high-speed machines;
4. Installed three traveling-spindle cone winders and five quillers (we now rewind all filling);
5. Replaced old twisters with 3" rings by frames with 6¼" rings and six-ply creels;
6. Replaced four Type "A" automatic spoolers with Type "D" machines (these are now scheduled to be replaced with the newer Type "F" spoolers);
7. Replaced four two-cylinder slashers with two of the hot-air type;
8. Installed 300 42" X-2 looms and changed all Model E's to accommodate beams with 26" heads, instead of 18".

The job has taken years of hard work, but it was done without halting production.

Finisher's own finish

Lynrus Finishing Co. developed and applies its own permanent flame retardant

Staff prepared Exclusive

THE HISTORY of the Lynrus Finishing Co., Inc., Poughkeepsie, N. Y., in the field of flame resistance goes back only about 10 years — to a period, however, when permanence to laundering had not yet been satisfactorily achieved in finishes for clothing purposes. Permanent flame retardants were available, to be sure, in the years preceding and including World War II. And millions of yards of cotton fabrics were treated for such uses as tentage and tarpaulins. But it is almost needless to mention that these finishes lacked the versatile properties which fabrics for clothing purposes called for.

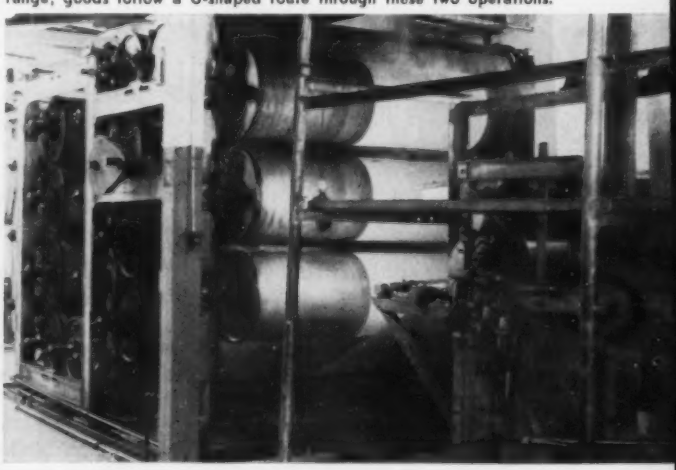
Thus, at war's end, as new chemical classes of compounds became available, research was intensified to develop permanent flame retardants, which would not appreciably impair the desirable properties of cotton. Within a few years, many flame retardants were placed on the market. But for the most part they met only with moderate success; some of them, in fact, had such serious drawbacks that they were withdrawn from sale. It appeared, then, that the ideal flame retardant for clothing uses still remained out of reach.

It was at this stage of research, in 1949, that the Lynrus Finishing Co. was organized to develop an improved flame retardant finish, one that would resist repeated laundering and dry cleaning. Such a product, to be known as Lynrus FR-1, was subsequently developed, and in 1952 the company purchased a plant in Poughkeepsie, where the development program entered more advanced stages, under the direction of the company's president, Charles F. Russell.

As further experimentation took place, pilot-plant trials gradually gave way to production runs. In 1955, when the product was proved sound, the company secured its first order, from the U.S. Navy Bureau of Aeronautics to treat a substantial quantity of fabric for officers' summer flying suits. Then, in 1956, the company began to produce the product in large quantities and simultaneously began to extend its application to a wider range of cotton and cellulosic materials.

Though only a short period of research went into the development of the product, actually many years of experience shaped the course of experimentation that took place in the laboratory, in the pilot plant, and in the production plant. For the individual members of Lynrus management, with long backgrounds in the field, had a strong appreciation for the growing complexity of flame retardants. No longer did simple concepts apply for the development of flame retardants. The newer concepts suggested more complex mechanisms and chemical structures by which permanent flame resistance could be achieved.

The two views below point to the delivery end of a 180-ft range, where treated fabrics are soaped and rinsed (right photo) and finished (left photo). This range is located next to the application range; goods follow a U-shaped route through these two operations.

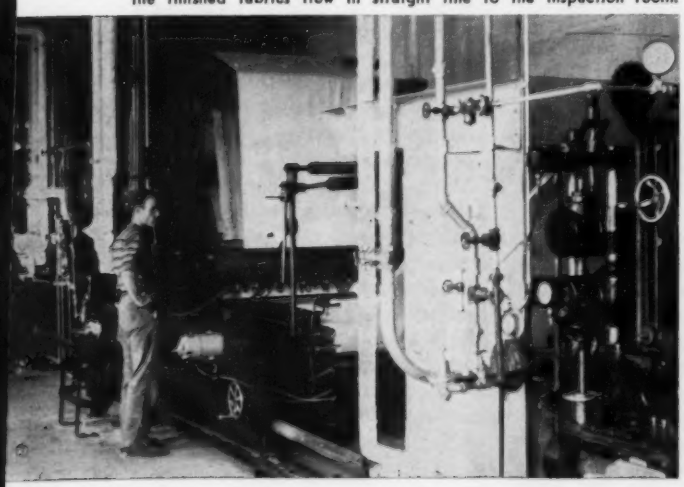


A specialist in permanent flame retardancy, Lynrus Finishing Co. conducts its own research and makes product in its own labs. Above, a cotton fabric is impregnated with the flame retardant and passes into a finishing range where product is permanently fixed to fiber.

Thus, from the beginning, research at Lynrus was carried out under a favorable climate, and under the direction of Clarence B. Hood, it brought forth the breakthrough which enabled the company to enter a relatively new field of operation.

Today, this strong emphasis on research continues, and it is interesting to note that a staff of eight, or about 20% of the company's total employees, are actively engaged in research. The projects under investigation are not only of a long-range character but of short duration as well, intended to bring about steady improvements in quality and continual reductions in costs. As a further appreciation of the need for re-

This compressive shrinking unit was recently installed; from here, the finished fabrics flow in straight line to the inspection room.



Inspection below is the final quality control check point. All the plant's processing equipment is on one floor of multistory building.

In Lynrus' laboratory, technician in foreground is measuring air permeability; technician in background is checking flame retardancy, noting flame and glow times and char length. Above, resistance to repeated launderings, most crucial test for flame-retardant finishes for clothing, is checked. Resistance to home laundering is measured in right of photo; more severe test is made at left. The Lynrus-treated fabric withstands fifteen repeated launderings, without loss of fire-retardancy; it is inherently mildew-resistant.

search, some problems requiring more fundamental study are turned over to outside consulting laboratories.

Research Objectives. In essence, the objectives of a permanent flame retardant are readily defined, though the mechanism by which it works may be complex: First of all, the treated fabric must not support combustion. And though it is expected to char, since cotton begins to decompose at temperatures above 250 F, the length of char must be short and within established specifications. Moreover, there must be a minimum of smoldering or afterglow, for this can cause serious body burns.

If the treatment is to be permanent, then it must withstand repeated launderings and dry cleaning without loss of these important properties.

In the development of Lynrus FR-1, much research also centered around the preservation of fiber and fabric properties. Among these, tensile and tear strengths, residual shrinkage, color fastness, stiffness, and hand ranked high on the list of individual research projects. These, and many others, to be listed later, are laboratory tested before the fabric leaves the plant. Certain properties, such as air permeability and tensile and tear strengths are, of course, influenced by fabric construction; but they can be influenced as well by the chemical nature of the product and by the conditions of its application.

During the more advanced stages of the development program, much planning went into the design, assembly, and lay-out of the processing equipment. These projects came under the personal direction of President Russell, who designed some of the processing units himself.

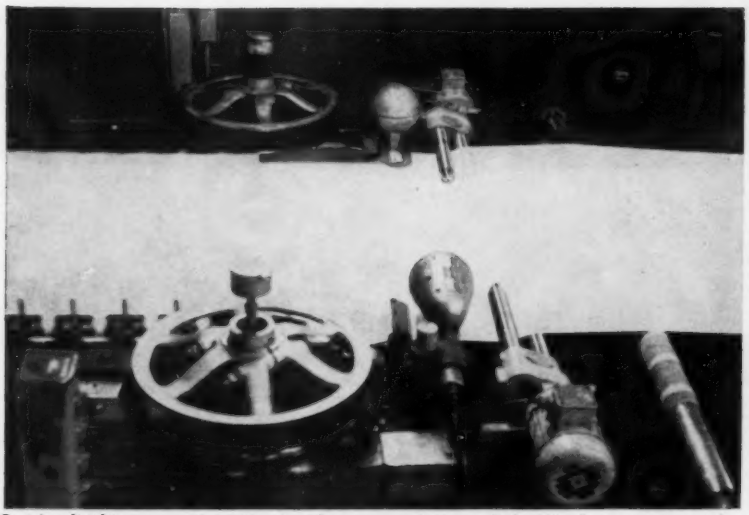
The Lynrus plant is multistoried, offering only about 35,000 sq ft for research and laboratory facilities and for product manufacture and processing. But as in plants of more modern design, the processing equipment has been laid out on one floor, in a pattern that affords a smooth flow of fabrics in process with little handling. There still remains space for expansion, and only recently a compressive shrinkage unit was installed. If a higher output is required, the plant can go to multiple shifts.

Application of Flame-Retardant Finish. The heart of the flame retardant process is comprised of two operations: application and after-treatment. Both of these are carried out on continuous ranges, built up of individual units, each designed for a specific purpose, and each individually driven by motor — and all synchronized for tensionless processing.

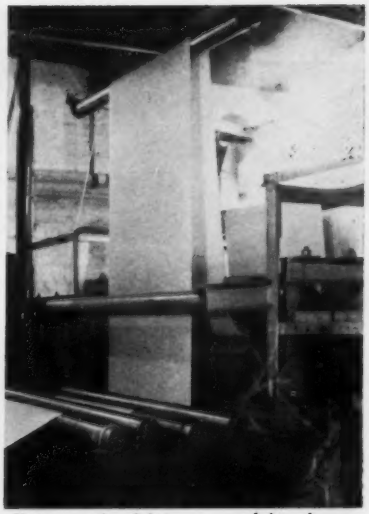
Only a casual inspection of the after-treatment operation, which may be properly described as an open-soaping-finishing range, would reveal that much planning went into its assembly. It is a modern range, equipped with recording and control instruments (see photograph), and features auxiliary pieces of equipment which make for more efficient and trouble-free operation.

Essentially, in this aftertreatment the treated fabric is given a thorough soaping, rinsing, and drying; followed by finishing and a final tenter-drying. These make for a total machine length of 180 feet. Among the operating and auxiliary features of this range, not to mention safety devices, are vacuum extractors which reduce water content before drying; selvage uncurlers; and a communications system for rapid exchange of information between operators at various points along the range.

After soaping-finishing, which produces a clean fabric with a pleasing hand, the fabric can be compressively shrunk, if necessary. The compressive shrinkage unit is located in an adjacent room, in a straight line with the inspection and winding room. Thus, the flow of goods from one operation to another follows a pattern formed by the letter "S" when placed on its side.



Soaping-finishing range is equipped with numerous devices which make for easier operation. Here the fabrics pass through selvage uncurlers and a set of electronic cloth guides which accurately position the frame to coincide with the movement of the advancing cloth. Then the fabric enters the tenter-dryer in a last section of the range. For increased drying efficiency, the fabric passes (above) over vacuum extraction slots, which appreciably reduce fabric moisture. Unit is between rinsing and drying on soaping-finishing range.



Quality Control. The specifications which have been established for permanent flame retardants by various agencies, such as the military, are quite stringent. And to meet these, Lynrus' management has set up a quality control program with three phases:

1. Quality control in the manufacture of Lynrus FR-1.
2. In-process quality control.
3. Laboratory testing of the finished fabric.

Of greater interest to this article are the second and third phases of this program. In application, exact control of the padding operation is particularly necessary to produce a fabric with the required amount of retardant — a very essential factor for satisfactory flame resistance. Thus, inspection and maintenance of equipment and instrumentation follow a periodic schedule.

The company has its own machine shop, adequately staffed and equipped, to do most types of repair work including turning down rubber rolls.

Management has also created a technical liaison position, which has been filled by an experienced engineer who operates between plant and laboratory. His work is largely translation of laboratory testing results into the necessary changes in the plant when quality approaches the borderline.

Aside from the tests that are carried out on the fabric during processing, much more extensive testing is done on the treated fabric. These tests, for the most part, are well known, and need only be listed without descriptions of how they are carried out. On a cotton twill fabric, which must meet military specifications, the following tests are made (indicating, incidentally, the diversity of properties that permanent flame retardants must possess):

Weight
Yarns per inch
Breaking strength (ravel strip)
Tearing strength (tongue)
Air permeability
Shrinkage in laundering
Sewability
Colorfastness (to light, laundering, etc.)
Acidity (pH)
Stiffness of cloth (cantilever bending method)
Fire retardency (before and after 15 launderings) as follows: flame time, glow time, length of char in inches.

In discussing the finish and fabric properties, it is also interesting to note that the flame retardant treatment as applied at Lynrus, can withstand the 14-day soil burial test and can resist mildew growth, even after numerous launderings. The finished material and the flame retardant as well have been examined by the Surgeon General of the U.S. Army Medical Department and found safe to use in contact with the skin.

Marketing and Diversification. A remaining management function, though certainly not the least important, is marketing. This falls under the direction of Henry J. Franklyn, a vice-president and co-owner of the company with President F. Russell — from whose names the company name of "Lynrus" was derived. Aside from the day-to-day marketing activities, there is continual exploration of new fields and markets for the company's finish.

Though management feel that their product is sound and has been so proved, research continues in an effort to produce improvements in quality. In production, the aim is to remain modern and thus keep costs at a satisfactory level.

The company could easily diversify into work closely related to flame resistance. This could easily include the application of crease resistant and other specialty finishing. But management believes that the field of permanent flame resistance has become so highly specialized that its research and production efforts should be confined entirely to this field — in the interest, too, of maintaining the high standards of quality that it has established for its finish.

A good way to quickly check for impairment of pitch of clothing on a card is to compare the feel of the wire on the card with that of new clothing of the same type. The author says he keeps a short piece of new clothing in his pocket at all times for this purpose.

Veteran boss carder gives many practical tips on

clothing woolen cards

by C. Jay Williams
Exclusive

IF THE CARDING room is the heart of a woolen mill, then the clothing is the heart of the card. As the clothing is, so will the card performance be if all other factors (such as the mechanical condition of the carding machine and supervision) are normal.

The right clothing in the right place for the job in hand means everything to woolen carding, and it is the principal factor in producing top quality yarns at the lowest cost per pound—by obtaining the highest possible production compatible with the quality of the blends. There are intangible results, such as improvements in all following operations, that cannot always be definitely measured in dollars and cents savings.

The whole carding machine—the frames, cylinders, doffers, and all other rolls—are designed and built for the one purpose of placing the clothing in a position to function most efficiently. In other words, all cylinders and rolls are merely a foundation for the card wire, and the more accurate the machining of all card rolls, the more efficiently the clothing will function.

APPLYING THE CLOTHING

Clothing must be applied to the card rolls neatly and under the right tension. The strip of clothing is wound on to the roll in a spiral, so each end of the strip is tapered to fit it neatly to the cylinder edges. Some of the wire must be removed (pulled), and each row must be pulled at exactly the same length.

To find the right length to "pull" from each row (outside taper): Count the rows on the back of the clothing strip. Divide the circumference of the roll to be covered by the number of rows of wire present.

Making a list of the correct

lengths to pull for all card rolls as per the number of rows of wire is convenient for a quick reference. For example:

Circumference	No. of Rows	Calculated Length of Section (Pull)
188.4 (60" dia)	6	31½"
188.4 (60" dia)	8	23½"
22 (7" dia)	5	4⅜"
22 (7" dia)	6	3½"

(In the above the length of pull is obtained without regard to stretch. Work carefully in this area until working tensions and stretch are given constant values and recorded. Some authorities recommend that ¾" stretch per section of pull be allowed for when clothing a 60" cylinder but warn that this will vary with each change in tension setting. Thus, one way to establish the exact length of section to be pulled is to subtract ¾" from the calculated section lengths. Yet, some operatives make no stretch allowance and seem to get the equivalent results.—The Editors)

At the start of the winding, and before driving in the first tack, make sure that the outside edge of the row of wire is ½" in from the edge of the roll being covered. And at every "notch" keep each succeeding row of wire the same distance from the edge of the roll. Then if all rows of wire have been pulled evenly in length, the clothing will wind on in a perfect spiral.

The first wrap is most important, since a bulge or crook sideways in the spiral at the start will throw all the other winding out of line, and clothing may start to ride up onto clothing already on the roll or there may be a long empty gap at some point of the winding. Also, at the end of the winding, pulling the wire to make a neat finished taper will be more difficult.

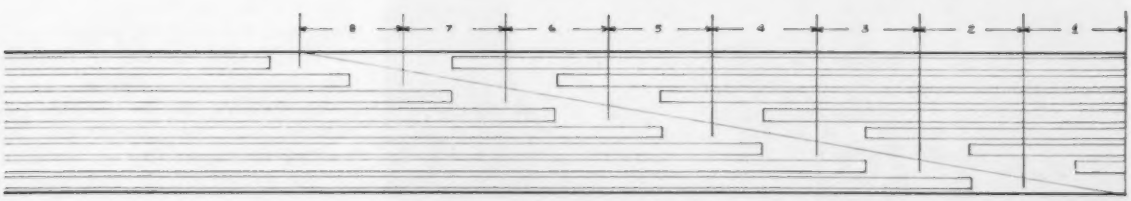
Upon reaching the final spiral, stop the winding motion when edge of clothing is ⅝" or ⅜" from the edge of the roll; then start pulling the rows of wire to make a taper exactly as at the start of the wind, with the edge of each notch

Steps in reclothing a card include stripping it, examining it for mechanical defects such as bad bearings, and readying the cylinder

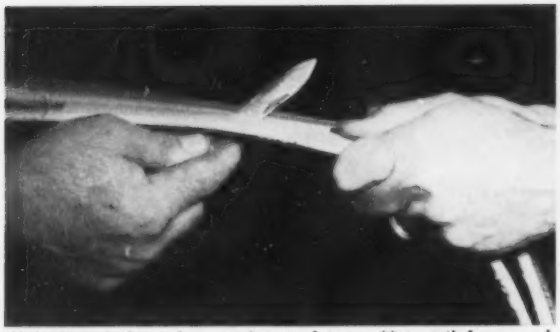
as indicated in the two photographs above. Fill all tack holes—especially those around the cylinder edges—with pegs and file off.

While cylinder turns, smooth it to touch. Then apply undercoater.

Measure taper sections and begin to pull thousands of wire teeth.



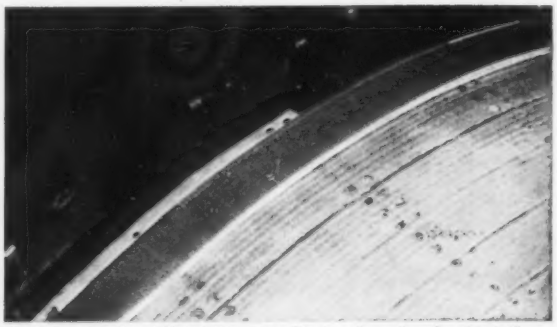
A schematic representation of an open taper showing the method of marking the taper into sections obtained by dividing the number of rows of wire in the fillet into the cylinder circumference and using the quotient as a section length. Thus, there being eight rows of wire represented, there are eight sections. The drawing is not to scale, being considerably foreshortened, so the amount of pulling reflected hereon is far less than is found in practice. The tip of the taper is cut off at a point at which the taper width approaches ½", then the first foot of usuable fillet is pulled bare and called the tail.



With sharp knife, make smooth cut of taper. Note tail foreground.

Thread taper through tension machine, check for loose wire areas.

Tack end of tail twice, pull tight, align to cylinder edge, tack.



Fit taper so that fillet falls naturally in place beside the tail.

Guide every inch of clothing neatly into place. Note complete turn of twist in fillet.

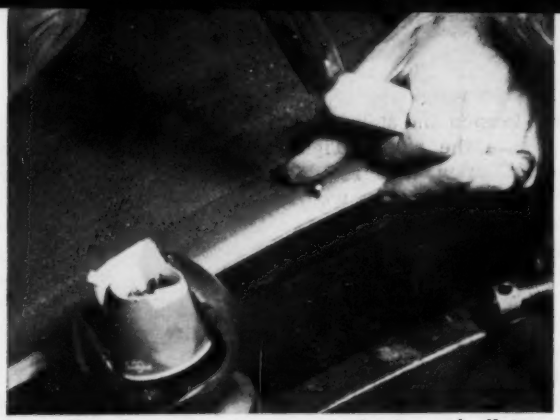
½" from the edge of the roll. There should be a ½" selvage at both ends of the roll.

If wire is brought out too close to the edge, the outside wires get bent and twisted, catching and collecting lint and stock. This not only looks messy but can become dangerous since if enough lint balls up at the end of a roll and drops into the cylinder a wreck may occur. The above procedure of winding on clothing applies to cylinders, doffers, and all other card rolls.

It is important that all the wire be pressed firmly into the foundation, since if a section of the clothing gets onto the roll with the base of the wire protruding slightly below the foundation, a blister will appear after the card is in production, and the clothing surface will be rough and uneven. A rewinding job is the only remedy.

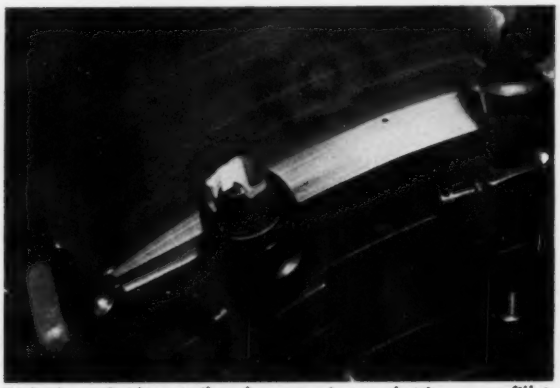
An expert, as he guides the clothing onto the cylinder, can (by holding his finger tips on the back of the clothing) feel any uneven spots, then stop the winding operation and rub the base of the wires into the foundation. The "helper" should do this rubbing as the clothing passes to the one guiding

Pull finishing taper to keep wire about ½" from cylinder edge.



Tack sufficiently to prevent creep as tension is eased off taper.

Now pull in earnest as the taper requires fewer and fewer points.



Tack down finishing tail, release tension, and trim away fillet.

it onto the cylinder.

Tacks are Important. A 7-ply foundation with heavy felt face will require a No. 18 tack, and for a light 5-ply flexifort a No. 14 tack is the right length. For safety's sake securely fasten the foundation to prevent its loosening or to mitigate the damage in case of a card wreck. An ordinary ice pick, preferably one with an all metal handle, makes a handy and inexpensive tool for locating the wood plugs and saves pulling out bent tacks which so often tear the foundation.

On cylinders and doffers leave a bare strip of foundation 12" long at the tail end of the taper for extra tacking to more securely fasten the tail to the cylinder, since this is the danger point where the clothing is more apt to give way if hit a severe blow by a chunk of stock or a hard burr.

The fancy needs special attention in that the tension must be very light—especially if the foundation is leather. Any undue stretching will cause the wire to vary in pitch, making a rough, uneven surface; and the operator must be guided by the appearance of the first two or three wraps around the roll and regulate the tension accordingly.

There are several types of fancies, each of which may be made to do good work.

Clothing the Top Work. Cloth is wound onto workers and all other small card rolls in a floor winding stand. On one type, tension is furnished by winding clothing onto a large fillet drum that is fitted with a brake, usually a strip of leather passed around a metal pulley fastened to one end of the drum.

The roller to be covered is set into its stand and its end play removed by setting washers tightly against it. The roller is cleaned and the end of the fillet (usually supplied in 500′ to 1000′ rolls) is tacked to it and drawn onto it without tension until the roll is covered. Then the fillet is cut loose from the reel, clamped to the fillet drum, and is backwound onto it. The roll of fillet is kept on a floor stand.

As a finishing touch, tack the tapers securely at all points to prevent creep.

Set the weight lever to the desired tension and start a test winding onto the roller. Tighten the thumb screw that regulates the brake band until the weight lever "kicks," or balances. Now, release the tension and rewind the clothing to the fillet drum.

Calculate the taper, pull the wire, cut and tack the taper to the roller, apply the tension, and clothe the roller as if it were a 60" cylinder. This method of setting the tension enables one to cover any number of rolls under the same tension without further setting. Make sure the wire is rubbed snuggly against the back of the clothing as was explained for winding the cylinder.

The narrow fillet used on top work must be applied with less tension than is required on the wider cylinder fillet. And each type of narrow fillet should be wound under the tensions suggested by its manufacturer. By way of comparison: cylinder fillet may be wound under 400 pounds; some top work fillets 75 pounds or lower.

RECOMMENDED WINDING TENSIONS

	Diameter	Tension
Cylinder	60"	400 lb
Doffer		350 lb
Worker		175-200
Stripper		150
Fancy		50-60

*A suggested rule of thumb is 45 to 50 pounds per crown or row.

WHEN TO REPLACE CLOTHING

I find that money wisely spent on card clothing is an investment that pays big dividends *if the cards are ably supervised.* Once, after taking over a 20-set card room, I found the clothing generally in an advanced stage of deterioration, and management, naturally, was dissatisfied with production and roving quality.

The first big obstacle I met was the purchasing agent, who had to be persuaded to order a large supply of badly needed clothing. He finally agreed to order enough for two cylinders, two doffers, and two fancies, and to order several hundred feet of worker clothing. Concentrating on one card, I installed that order to demonstrate the benefits of good clothing.

With the new clothing, yarn tests ran so high that we boosted production 30 per cent (to approximately 45 pounds per hour), and automatically reduced costs on that particular card. There was a 20 per cent reduction in clean fiber loss in the form of card waste, which cut the cost of the blend. Subsequent operations improved greatly, contributing intangible benefits which are hard to figure in dollars and cents.

At 45 pounds per hour, subtracting ten per cent for lost time, the annual production of this card for fifty 144-hour weeks was now 290,000 pounds. By manipulating the stocks in the blend and running a trial lot on it, the superintendent reduced the cost of the blend three cents per pound without impairing yarn tests or the feel and handle of the fabric. Based on the above annual production, this all meant an impressive savings of $8,700 annually.

Greatly impressed by these results, the front office ordered an immediate survey of the clothing on all cards to determine the clothing needed to put the entire room on a high efficiency basis. That office also conceded a generous allowance of 30 per cent for deterioration.

This, of course, was an extreme case in which no definite depreciation allowance had been made for many years. But it does illustrate the benefits obtained if clothing is maintained at a high level of efficiency.

Depreciation Schedules. It has been my observation, over a long period of years, that not all woolen mills make any definite depreciation allowance for card clothing. Yet this is certainly the most vital element of supply for the woolen card and perhaps for the whole mill. A definite rate cannot be made to cover all mills, since 20 per cent might be ample for a mill making soft woolens such as fine flannels, and 30 or 35 per cent would be a fair and reasonable allowance for a mill running coarse, long-fibered blends exclusively. In any case, it is best for the good health of the mill to make a generous allowance with no penny-wise, pound-foolish policy.

In establishing replacement rates, the time element, or length of service, should be discounted in favor of the poundage of stock passing through the card, and the final decision of making replacements must be made by an experienced supervisor basing his judgment on the actual condition and performance of the clothing.

Figuring a newly clothed card as being 100 per cent efficient, the overseer must strive to maintain a general efficiency of 85 per cent or better.

The first breaker, which must absorb the first shock of opening the stock and withstand the impact of hard burrs, will naturally need reclothing sooner than the finisher end of the card.

In general, but depending on the type of stock, a production of 500,000 to 600,000 pounds warrants some replacement on this unit. The finisher might handle twice that amount economically.

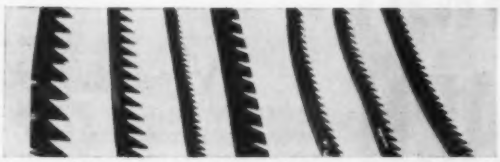
The constant hammering of stock against points and the continuous wire vibration takes its toll of the clothing. Gradually, the foundation gives way, and the wire loses some of its pitch. Even when the wire is not appreciably worn in length, and to the casual observer appears to be in perfect condition, much vital combing action is lost if the pitch has become slack.

Wire that has become loose in its foundation, causing a serious departure from its original standard pitch, will roll short, fine fibers into small pills. An experienced carder can tell instantly by sight and touch if the pitch is impaired.

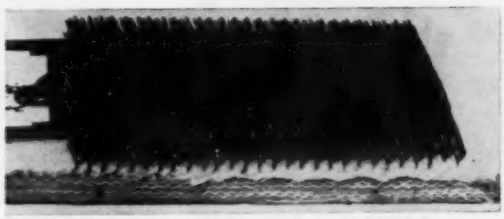
Sliding the finger tips along the surface and against the points of the wire and noting the resistance is a good test for pitch. I like to carry a short piece of new clothing with wire of the same size; and by testing first the new wire then the wire on the card, the degree of difference in resistance to the finger tips is more apparent.

Ways to Decide Replacement Rates. When no definite allowance is made for depreciation over a period of years, clothing efficiency gradually drops to the danger point. Then the mill is in for trou-

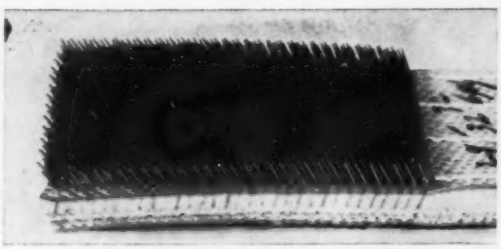
Representative samples of the many kinds of clothing one manufacturer offers for woolen cards



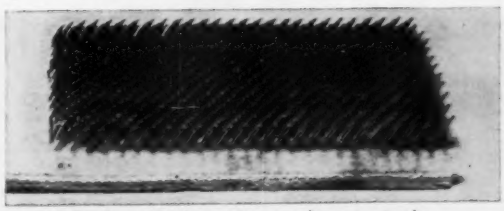
Metallic wire examples (l to r): No. 14 licker-in; 12-41-2CB licker-in; 18-thread breast worker; burr top licker-in; 12-thread doffer; 14-thread breast; and 10-thread worker.



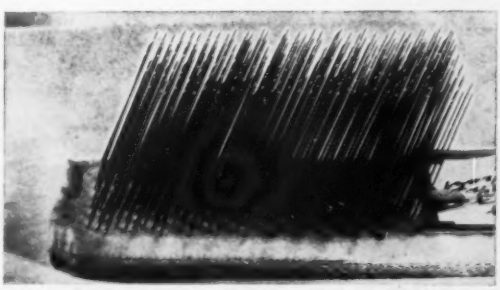
Seven-ply, wool-face, stitched, 26/30 DC wire fillet.



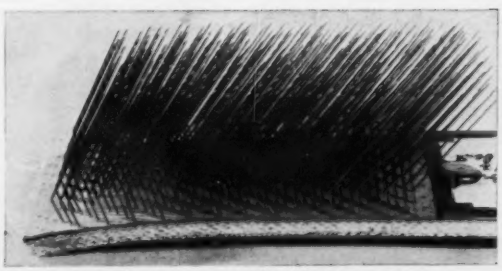
Finisher fillet, 28/32 double-concave (DC), six-ply, felt-neoprene, stitched.



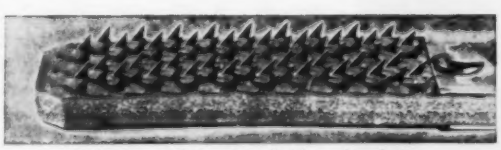
Breaker, 24 piano wire, regular set, six-ply, felt-face, stitched.



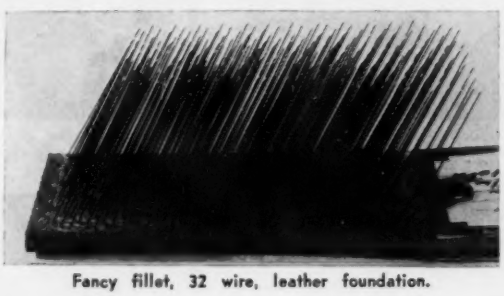
Fancy, 28 wire, five-ply, felt-face (FF).



Five-ply, 30 wire, rubber face for fancy.



Licker-in, 12/24 wire, leather foundation, as is most licker-in fillet.



Fancy fillet, 32 wire, leather foundation.

Staff photos of samples of clothing furnished by Howard Bros. Mfg. Co.

ble, and rehabilitating a group of cards in such condition is a long, expensive process. A sensible approach is to figure the average amount of money paid out for clothing over a period of years against the average amount of stock used. Then from these figures a fairly definite depreciation rate can be set and charged to costs.

At one 18-set mill where I was overseer for a great number of years, it was my practice to make a survey of all cards at the first of each year, and then list all the card wire needed for the coming year to give the cost accountant a chance to figure our costs more closely. At the start of the year, when most mills have a slack period, is a good time to make a survey, since this job must be done when the card is idle or is stopped for stripping or grinding.

Using an ordinary ledger book, the condition of all the card wire, including the metallic breast, of one set of cards can be listed on one page, reserving the opposite page for comments such as dates of installing new clothing. With this record, there will be no guesswork as to length of service since

Continued on page 292

SAABA TEXTURED YARN

What it is, how it's made, and where it's used

by Chester J. Dudzik
Leesona Corp.

Exclusive

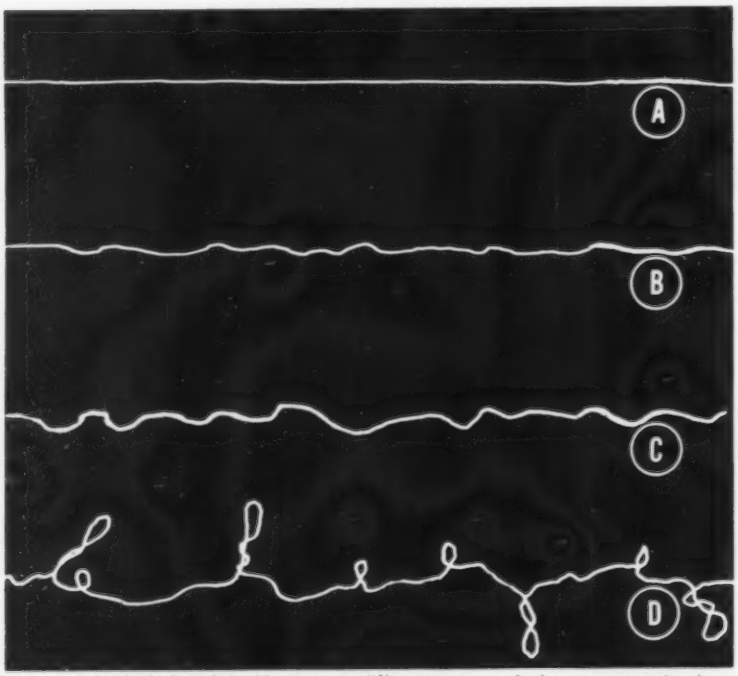


Figure 1. Individual Superloft filament at different stages of the crimp-stretch phase. This extends from completely stretched filament "A" to completely relaxed filament "D."

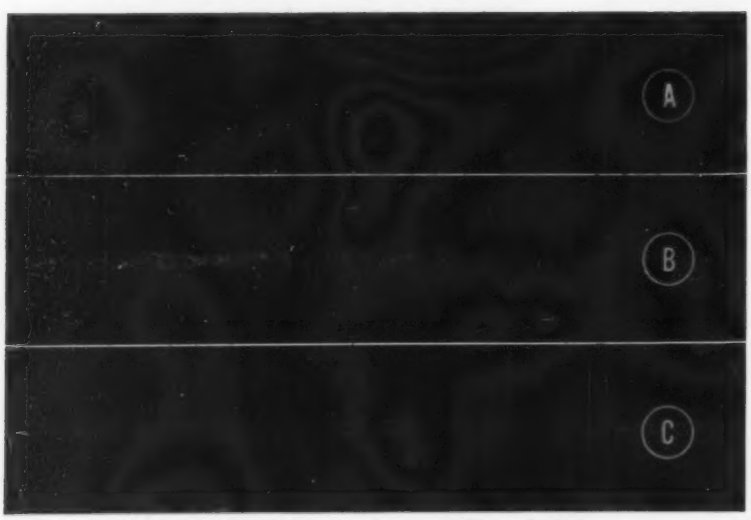


Figure 2. "A" and "B" are stretch yarns; "C" is a Saaba yarn.

WHEN thermoplastic filament yarns were first introduced, it appeared that they had many advantages over natural fibers for articles of apparel. This was not immediately the case, however. The first fabrics made from such yarns were rather stiff, impermeable, nonabsorbent, etc.—all qualities which are least desired in apparel fabrics.

The first thermoplastic yarns used in any quantity were spun yarns. These became most successful after crimp was imparted to the staple. Blending with natural fibers opened up another market for thermoplastic staples. The differential filament shrinkage development led to new and better applications of thermoplastic spun yarns.

Except for hosiery and lightweight tricot fabrics, where the above-mentioned fabric qualities were either acceptable or were overcome in garment manufacture, very little synthetic thermoplastic filament yarn was initially used in apparel fabrics. Its use was expanded only after methods of softening, bulking, and texturizing the yarns were developed. Many methods exist today for such conversion of filament yarn. The methods consist primarily of distorting the filaments by combined mechanical and thermal means. Some of the yarn producers have been able to do this by chemical methods on certain synthetic yarns.

Except perhaps for one, all of the texturizing processes enhance the quality of the yarn by crimping the individual filaments in a random manner. This then causes them to separate, thereby increasing the size and coverage of the filament bundle. This likewise results in a lower bending modulus for the filaments and yarn, and therefore softer fabrics. Each of

---

This is the third in a series of articles covering the various types of textured yarns. The first, "Stretch Yarn," appeared in the August, 1959, issue of TEXTILE INDUSTRIES, pages 102-105. The second, "Taslan Textured Yarns," appeared in the March, 1960, issue, pages 84-89, 107. The next article in the series will appear in an early issue.

these yarns also has a degree of stretch, or elongation as this crimp is pulled out. Saaba is such a yarn.

How Saaba Is Made. Saaba yarn is produced by a secondary processing of Superloft or Fluflon stretch yarns. These yarns were discussed in detail in a previous article.* This second operation on a stretch yarn controls the stretch of the yarn to any desired level, governed by the application for which it is to be used. For example, ladies' and children's sweaters are generally made from yarn with little stretch, for this results in a soft bulky fabric. Men's sweaters on the other hand are made from yarn with considerably more stretch. The resulting hand of these fabrics is quite harsh. Yarns for woven fabrics must have different degrees of stretch depending upon the warp, the amount of filling, the type of fabric texture, and stretch desired, etc. All of this is achieved by simple changes in machine settings.

As mentioned above, the fabric texture is likewise partially determined during this operation. In certain cases fabric finishing may alter the finished Saaba fabric. These differences are generally quite small and only control the degree to which a certain type of fabric may be made softer or harsher. The major fabric differences are reflected in yarns processed with large differences in overfeed.

Figure 1 shows an individual filament of Superloft yarn in four of its stages. Filament (a) is the completely stretched filament, while (d) is a completely relaxed one. Filaments (b) and (c) are intermediate conditions.

It can be noted from *Figure 1* that the stretch and bulk of the yarn are due to two factors. The first and major factor is the kinking of the filament shown in (d). The secondary factor on which stretch depends is the yarn crimp shown in (b) and (c). The degree of crimp determines the resulting fabric texture.

Figure 2 depicts a stretch yarn in (a) and (b) and a Saaba yarn in (c). The degree of kinkiness and crimp can be controlled to any desired degree between or at the conditions 1 (a) and 1 (d). The corresponding fabric range extends from filament fabrics where no crimp exists as in 1 (a), through a very soft cashmere fabric whose yarn has the crimp level of 1 (c) to a stiff rubbery one with a yarn crimp level like 1 (d). This control is achieved by accurately processing the stretch yarn under controlled conditions of tension and temperature. The tension is accurately controlled by a system of overfeeding the yarn into the heater zone.

Figure 3. Schematic diagram of the production of Saaba yarn on the No. 511 machine.

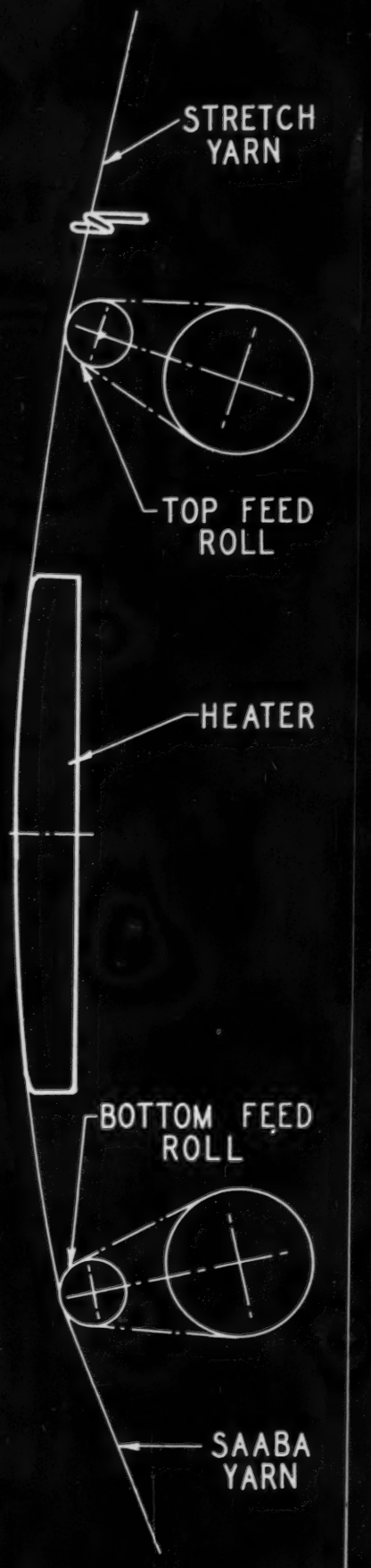


Figure 3 is a sketch of the "heart" of the No. 511 machine on which Saaba yarn is made. The important elements are labeled. As indicated, the stretch yarn is wound onto the top feed roll in a completely stretched state. It is then fed into the heating system and drawn out by the lower feed roll. The tension of the yarn within the heating area is controlled by maintaining a constant relative speed between the two feed rolls. In most instances the top feed roll rotates faster than the lower one, thereby drawing relaxed and crimped yarn into the heated zone. The heater temperature is controlled very accurately by means of an electro-mechanical thermoswitch.

Since the stretch yarn was initially made in the presence of heat, i.e., a temperature of approximately 440 F, reheating the yarn at temperatures approaching this value actually anneals the yarn. The temperature level determines the degree of annealing which takes place. Crimp and stretch are always diminished by this annealing.

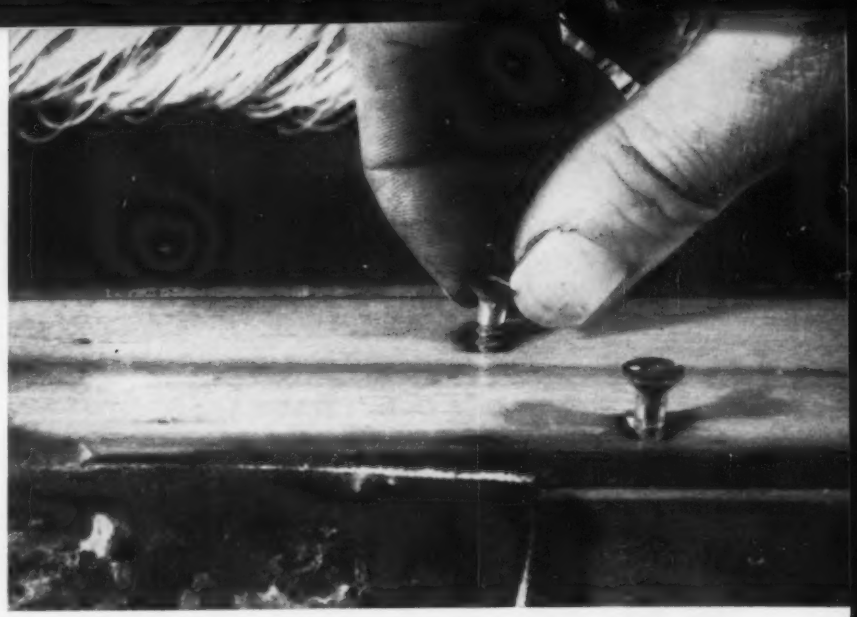
The condition of crimp at the time of this annealing likewise plays a very important part in the condition of the final yarn. The greater the crimp in the heating zone during annealing, i.e., at a high overfeed, the lower the annealing and the stiffer the resulting fabric.

Positive overfeeds result in

Continued on page 298

*TEXTILE INDUSTRIES for August, 1959, pages 102-105.

Remove the old race plate only after it is determined that 1/32" clearance exists between its back edge and the front of the back box plates. If the clearance does not exist, so mark the old plate that the holes in the new plate will give the needed 1/32" clearance. Suggestion: place new plate atop old one, position long straight-edge 1/32" away from back box plates and align back edge of new plate to back edge of straight edge and draw pencil line on old plate, using edge of new plate as guide.



GAUGES in Draper loom maintenance

Why loom gauges are needed and how to use them

Pry off the old shuttle race (race plate), being careful not to splinter it. Then tack the new race to top of it, adjusting edges to agree with any pencil marks found necessary.

Staff prepared
Exclusive

*Part 4**

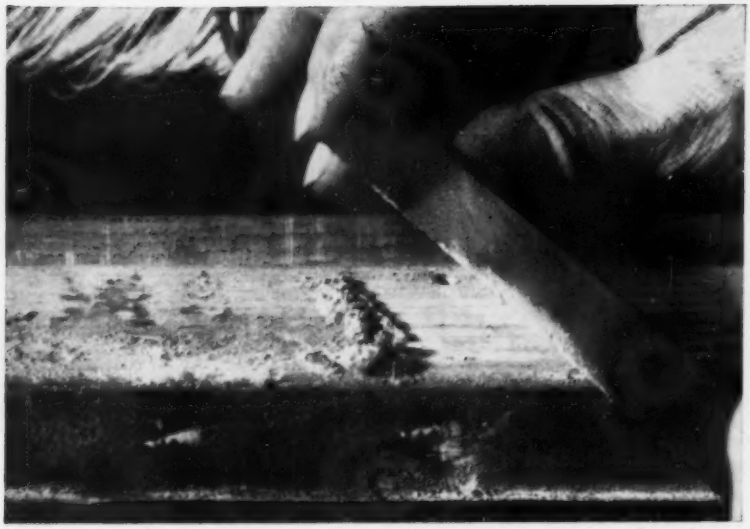
Lay alignment continued: replacing the shuttle race and aligning it with the lay ends

IF IT BECOMES necessary to remove the old shuttle race and replace it with a new one, if a lay end requires replacement, or if any change is made in race or lay ends that could create misalignment among those parts, both the lay ends and the race plate must be restored to correct alignment. This article presents techniques of such replacement and the consequent aligning procedures.

Shuttle Race Replacement. The sequence of steps in shuttle race replacement arrange themselves in a very logical order:

1. Position lay comfortably, set the brakes, and slack off on warp tension.
2. Cut the cloth about 6" or 8" from the fell.
3. Loosen hand rail bolts and lay the hand rail aside.
4. Lay the reed and the cut end of cloth back over the harnesses.
5. Remove the wood screws from the old shuttle race.
6. Pry the shuttle race carefully

*The first article of this series was published in the January, 1960, issue. Parts 2 and 3 appeared in the February and March issues, respectively. After publication of the series is completed, the articles will be reprinted in book form.—The Editors.



With the race plate out of the way, clean the lay of all accumulations of starch, etc.

from the lay.

7. Remove everything from the top of the lay down to the wood.

8. Tack or clamp the old race to a new one, face to face and keeping the back edges straight, at three or four places.

9. Using the holes in the old race plate as guides, drill and countersink new ones in the new race.

10. Align new race 1/32″ in front of back boxes.

11. Replace screws.

12. Check with long straight edge to see if shuttle race is straight and aligned with lay ends.

13. Scrape or sand away the high spots and shim the low places until race is straight.

14. Replace wood screws, making sure the 1/32″ distance in front of the back boxes is kept.

15. Sand race smooth.

16. Replace reed, pull over cloth, and start loom.

If the lay end plates do not line up with the new race, continue with the following procedure:

1. Remove box fronts and backs.

2. Remove lay ends.

3. Shim lay ends to bring them to height, or file away pads to lower them—the latter is rarely necessary.

4. Tighten lay ends in place and apply long straight edge.

5. Repeat steps two through four until ends align perfectly with shuttle race.

6. Replace box backs and check them for alignment.

7. Replace fronts.

Shim stock for this operation and that for the one of shuttle race alignment is in the form of dense, oiled paper (stencil paper, e.g.) that holds its dimensions well under weave room humidity. Cut the pieces large enough to be pierced by a screw or bolt during assembly if possible, to prevent its working out.

Before beginning to use the job breakdown, check the position of the shuttle race on the lay by taking a "reading" on it with the long straight edge. The back edge of the race should be 1/32″ in front of the back boxes. That distance keeps the race a comfortable distance in front of the reed.

If the old race is not reasonably close to this setting, make allowances for it when tacking the two races together by drifting the two races so that the new holes will be positioned correctly. Do not depend on being able to force the race back or forth on the lay after the screw holes have already been positioned. This is a small point, but it can be important. And always remember that the new race can be trimmed as needed.

Work carefully. Pry the old race from the lay so as not to shatter the thin wood and then clean up the lint, starch, etc., collected underneath it. Pull out any bits of wire brads that may be present, and otherwise get the wood ready for the new member.

Then tack the two races together with appropriate fasteners, placing the old one on top of the new one (and curving one to match the other if necessary) with the countersunk holes on the outside.

Using the holes in the old member as guides, drill new ones of the correct size through the new race. Then countersink the holes sufficiently to get the screw heads 1/16″ below the surface of the shuttle race.

Use a standard countersink drill to assure the screw head a firm seat against the countersink walls. These bits may be purchased in combinations that will sink the pilot hole and countersink it in a single pass.

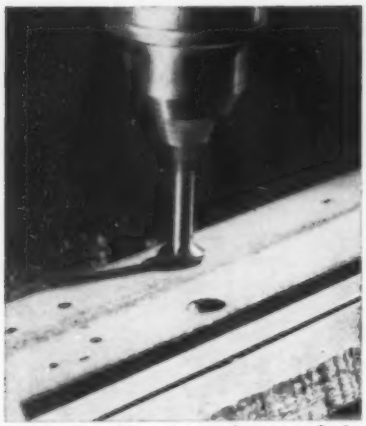
The screw hole should match the screw diameter, so don't accept the diameter of the hole in the old race as being the size the screw needs. Neither try to fit the screws tightly into the new holes if the assembly must finally be fitted to a series of holes already drilled in the lay. A slightly loose fit sometimes aids considerably in getting the screw heads to seat properly.

The fixer could well borrow a trick from the cabinet makers in fitting screws into their original holes. A tiny wood sliver, a flat tooth pick will do, dipped into glue and driven into the hole just before the screw is run in will take the last bit of looseness out of the fit. And a bit of soap rubbed on the threads will often make the most stubborn screw take the bit obediently. If the screws are rusty, do have compassion on yourself and get some new ones.

If shim stock is needed, use shim paper and make sure it is locked in place by having one or more screws run through it as the race is tightened in place, or that it is skewered by a wire brad here and there.

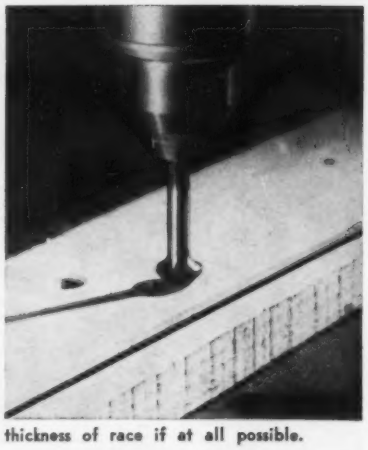
If it becomes necessary to remove wood from the new race, mark the place with a pencil to outline the high area (turn the long straight edge on its narrow side and get the eye near the level of the race in finding such high spots) and remove the excess wood *carefully*. Don't undercut.

Borrow another trick from the

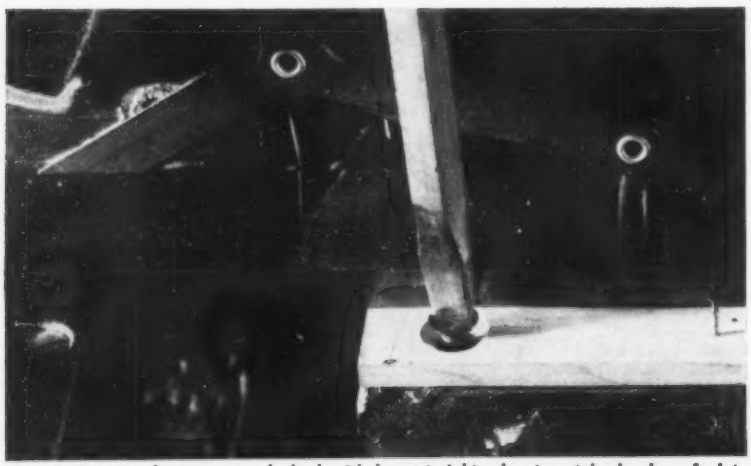


Secure the old race to the top of the new and drill through old holes into the new member. In this case a countersink drill is used to mark new member by using old countersunk holes as guides, for some of the old screw holes were so chipped it was difficult to ascertain their centers.

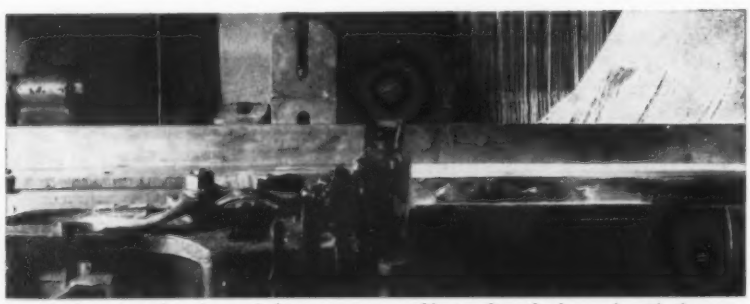
Then the races were separated and the marks left by the countersink were used to guide the drill through the new race (center picture). Then the new holes were countersunk so the screw heads were about 1/16" below the race surface. Do not let countersunk holes extend through entire thickness of race if at all possible.



Right Wrong



Tentatively set a few screws and check with long straight edge to set back edge of plate 1/32" in front of back box line. Trim edges of race plate if needed and drive screws home.



Use the long straight edge and shim or scrape or file to align the lay ends with the race.

cabinet makers in working down those high spots. Use a cabinet scraper to cut away the wood, and use sandpaper to smooth the surface. Never use them alternately, for the sandpaper will leave enough grit in the wood to ruin the scraper edge *immediately*.

A remarkable amount of wood can be removed in a short time from the flat top of the race by using a block of wood a little wider than the race and some six inches long as a form around which the paper is crimped. The width is assurance that the full race will be cut away during the sanding, and the length is sufficient to bridge short unevennesses in the wood. Start with a 1/0 garnet grade for the fast cutting, and finish off with a 4/0. Avoid flint paper, for it is both too soft and too dull for fast cutting, but substitute emery cloth of equivalent grades if desired.

"Break" all corners on the race by rounding them slightly with the sandpaper, inspect the surface for splinters near the edges and around the holes, and leave the race smooth to the touch. Check all screws before leaving.

Lay End Alignment. When these must be lifted to line up with the shuttle race, build up under them with shim stock. If they must be lowered into the lay wood, remove enough metal from the file pads to bring about the needed alignment or remove wood if no shoulders or pads are present.

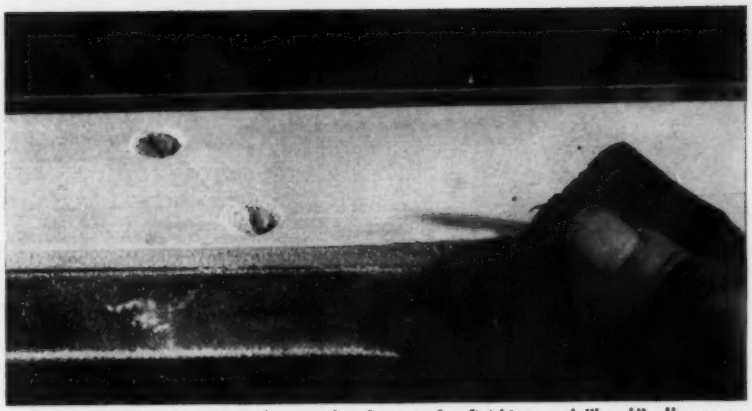
Normally this is as simple as removing the lay ends, placing the shim stock or removing excess metal from the file pads, and repeating the operation until the lay ends line up with the shuttle race

and meet the lay height gauge test for twist. And normally this step is taken only rarely, compared with other routine loom repairs.

But when the straight edge shows that the lay ends are out of alignment, immediate steps should be taken to correct the misalignment. This is especially true at the battery end where the terrific pounding from the transfer motion is absorbed by the weakest part of the lay. Once a little looseness occurs there, wear proceeds with alarming speed as wood and metal scrub away at each other at an ever-increasing pace.

Keep an especially sharp eye on the alignment for a few weeks after the lay ends have been reset, for both shim stock and wood slowly compress under the very bolt pressure that holds the assembly intact.

Some people prefer to omit all nails and/or wire brads from the finished shuttle race, because such fasteners have been known to work upward to pick at the shuttle and to snag ends. Actually, if one examines the situation closely, it becomes evident that such fasteners are not really needed because of the screw spacings.



Sand the race smooth, using a fine grade of paper for finishing, and "break" all corners.

These occur about every six inches on the narrow looms and about every eight inches on the wide looms; and they need not be placed exactly side by side so that their arrangement reduces the spacing even further.

If the shuttle race decides to bow upward between screws set so closely, the presence of a couple of wire brads or "special fasteners" cannot do much "preventing." If that (bowing upward) be a problem, probably the screws should be set on four-inch centers in staggered rows.

It is entirely possible that the custom — if it may be called that —of using the nails or brads between the screws sprang up so long ago that its original meaning is lost. Or it may be a hold-over from the practice of tacking the shuttle race in place on a new lay to hold it there while the screw holes were drilled.

(To be continued)

Man-made fiber use gained steadily in last ten years, study shows

■ OVER THE ten years from the beginning of 1949 to the end of 1958, man-made fibers have gained consistently in the inter-fiber competition with cotton and wool in all but a few of 101 end uses, according to *Textile Organon*, statistical bulletin of the Textile Economics Bureau, Inc.

The Bureau's continuing study of fiber end use consumption compiles data for representative categories of apparel, home furnishings, and other consumer products, as well as consumption of fiber in industrial uses and in exports of domestic products. Data are available for the year 1937 and the decade beginning in 1949.

The latest study reveals that a total of 1,629,000,000 pounds of man-made fibers were consumed in 1958, which was 26.3 per cent of an estimated total of 6,189,000,000 pounds of fiber (cotton, wool, and man-made) consumed that year. Consumption of man-made fibers in 1949-1950 averaged 1,191,000,000 pounds, or 20.4 per cent of the total.

By way of comparison, cotton consumption in 1958 amounted to 4,021,000,000 pounds, or 65.0 per cent of the total, while in 1949-1950 its average consumption came to 3,908,000,000 pounds or 67.1 per cent. Wool's share in 1958 came to 8.7 per cent of total fibers with a consumption of 539,000,000 pounds, compared with a 1949-1950 average of 726,000,000 pounds (12.5 per cent).

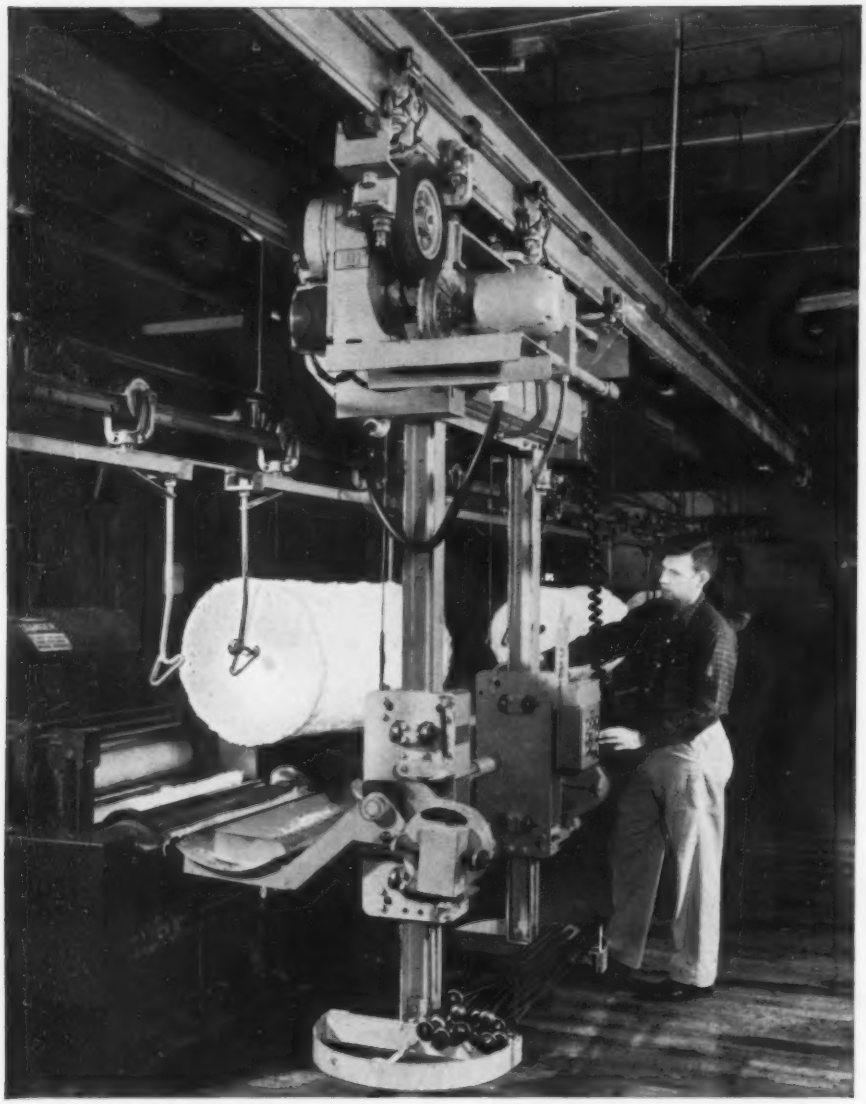
There are many factors that affect fiber end-use consumption trends, according to the report in the publication. Taken into consideration are first, the trend toward lighter weight apparel which brings into use cloth weighing less per yard and also the fact that there are fewer yards per average garment in many cases.

A second factor, it was pointed out, is the "color-style" element. In women's dresses, for example, changing fashion often leads to obsolescence of apparel before the full wear-life has been realized.

Third, there are different ways in which the consumer may wear certain apparel items, as well as different times of the day he may do so. At one time the so-called sport shirt was worn for leisure only, but now the sport shirt is worn for every day working time and may be widely substituted as a "work shirt" as well.

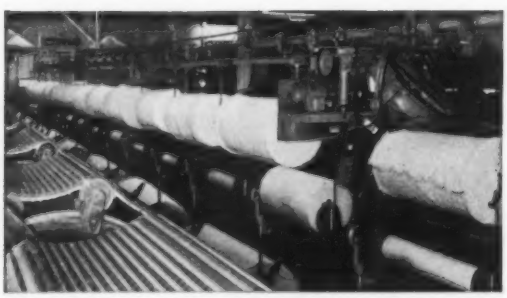
Fourth, shortening of the work week and the increased standard of living has resulted in greater demand for sportswear and leisure wear clothing, without proportionately curtailed consumption of business-wear items.

Finally, the article states that fiber consumption gains in children's wear have not been proportional to the increase in that segment of the population by age groups over the survey period. Of significance is the hand-down clothing to younger children as well as the re-sale of outgrown apparel.



1 Tender serves 12 (or more) pickers

See American Monorail equipment at Booth 1437 ATMA Show, Atlantic City.



Monorail Train when fully loaded travels automatically throughout the card room. Card tender can manually stop train at any position to creel the cards. High velocity ceiling fan traveling with train keeps ceiling clean.

Lifts..Weighs..Handles Laps
cuts cost of lap handling

This Lap Balance and Lift Car not only checks lap weight but also lifts the lap from the picker to an American Monorail lap handling system. The operator is never required to lift the lap, so consequently the weight of the lap may be increased as desired.

This machine automatically positions itself to receive the lap when it is rolled a few inches out from the picker. After checking lap weight and automatically placing the lap in the carrier, the machine automatically positions itself in front of the next picker to repeat the cycle.

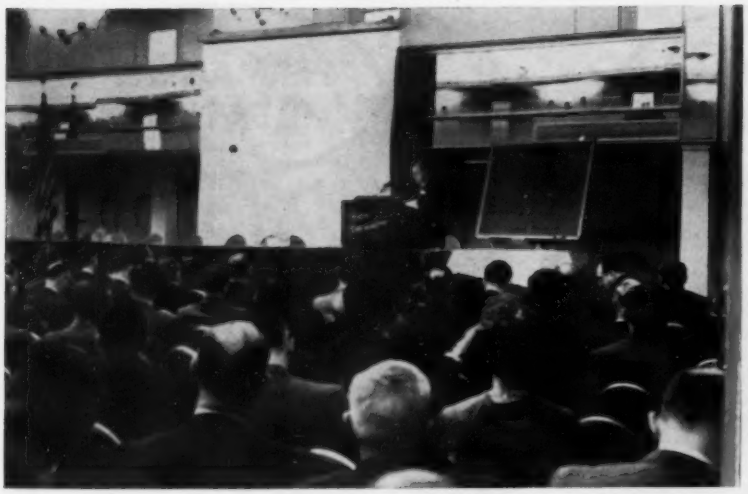
AMERICAN MONORAIL © A.M.Co. 1959

Engineered Automatic Cleaning and Handling Systems

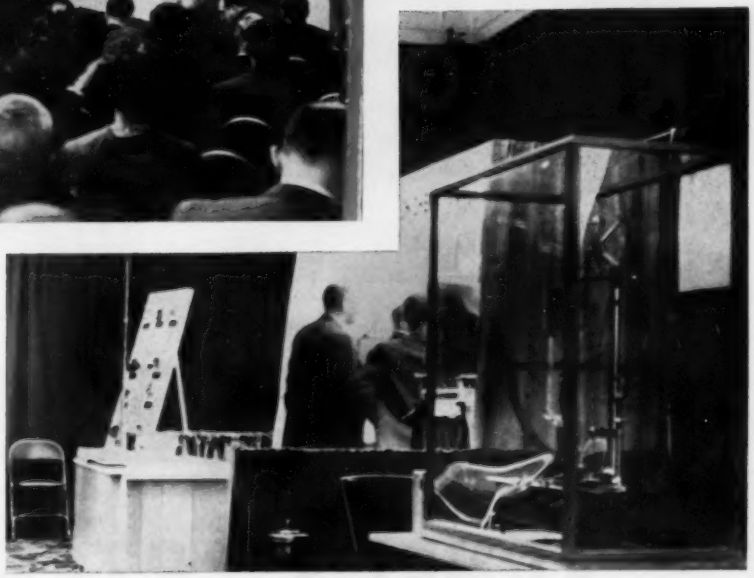
1106 EAST 200th STREET CLEVELAND 17, OHIO

OVERHEAD HANDLING EQUIPMENT

MEMBER OF AMERICAN TEXTILE MACHINERY ASSOCIATION



Partial view of the large audience comprised of representatives from the textile and allied industries that heard presentation of TRI papers. Below is a portion of the display of textile research and testing instruments which was available for inspection by conferees between sessions. Of historial interest was the tensile tester pictured on page 133.



TRI conventioneers heard reports on research in rayon fibers with cotton-like properties and

crease recovery of cellulosics

Staff report

REPRESENTATIVES from all branches of the textile and allied industries gathered at New York's Hotel Commodore on March 24-25 for the Textile Research Institute's 30th annual meeting.

Members of the Institute's staff reported on progress of various projects carried on at the Institute's laboratories in Princeton, N. J., while speakers from the industry reported on new fiber developments and their utilization, and on pertinent phases of advancing research in processing and finishing.

Two papers, in particular, reflected the industry's continuing research in rayon fibers with cotton-like properties, and in crease recovery of cellulosic materials.

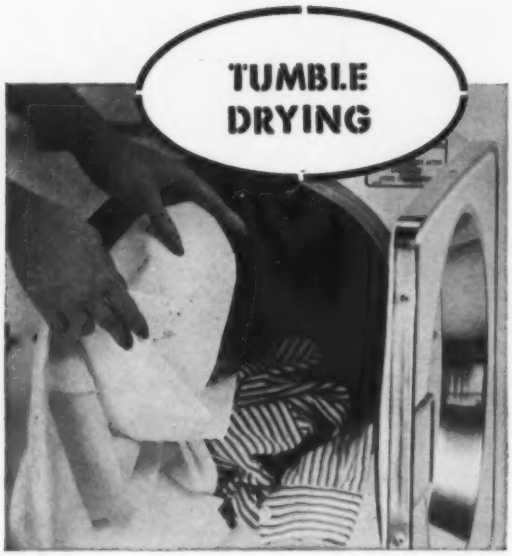
Crease Recovery and Wash-Wear. Ordinary dry crease recovery does not adequately indicate wash-wear behavior except in special cases, and other factors must be considered to get an understanding of the processes involved. There are three such factors: wet crease recovery; fiber structure; and the drying procedure used in wash-wear evaluation. These topics formed the basis of a paper by Richard Steele, of Rohm and Haas Company, titled, "Crease Recovery and Wash-Wear Behavior in Cellulosic Fabrics."

Wet Crease Recovery. In discussing wet crease recovery, Mr. Steele demonstrated in a series of four slides, the relationship of wet crease recovery to dry crease recovery and to wash-wear behavior, and how different combinations of properties can be achieved by chemical treatments. (Refer to illustration on p. 199.)

Slide 1 contains 100 points, which represent laboratory treatments on rayon. Their tumble-dry wash-wear rating has been plotted as a function of wet crease recovery on the vertical scale and dry crease recovery on the horizontal scale.

The numbers at the margins indicate the minimum dry and wet crease recoveries required for descending wash-wear ratings, beginning in the upper right hand corner.

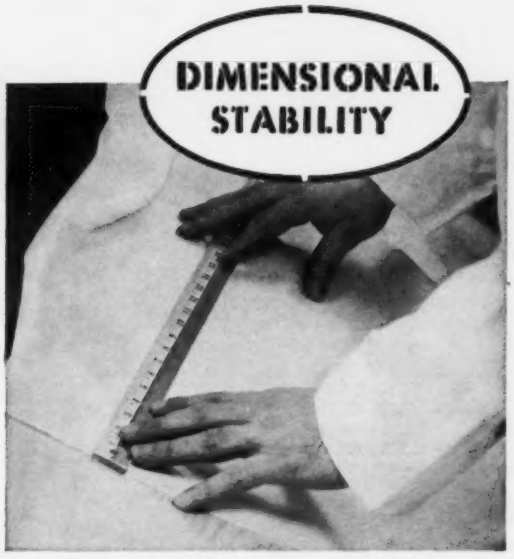
In concluding about the experiments in *Slide 1*, Mr. Steele stated



ARNEL*

*This is the official Arnel symbol—evidence that this fabric of this new triacetate fiber has been pre-tested for performance claimed.

ARNEL'S "STAMPS" OF CONSUMER APPROVAL



Separately . . . and in combination . . . these "stamps" of approval are working for you in the consumer market just as successfully as you work with Arnel triacetate in the mill.

You accept Arnel for its running efficiency and processing flexibility. The consumer accepts it not only for its beauty but for its ease-of-care and styling versatility. Here you see just eight of the "reasons-why" for its acceptance.

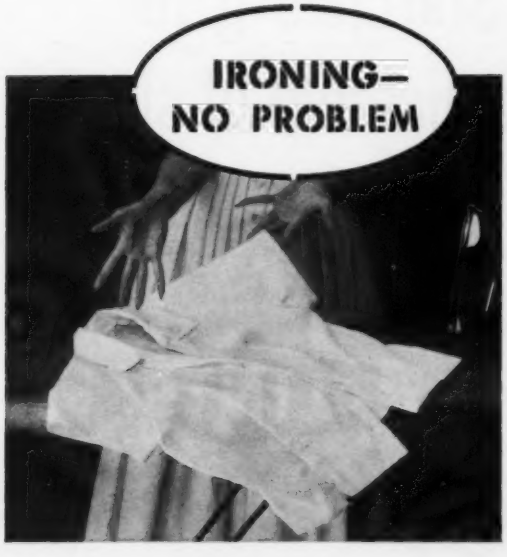
Let Celanese work with you to develop new Arnel fabrics. Booklets 12A, 13A and 14A, containing the important technical procedure and facts about Arnel, are available by writing Celanese Fibers Company, a division of Celanese Corporation of America, Box 1414, Charlotte, North Carolina. Celanese® Arnel®

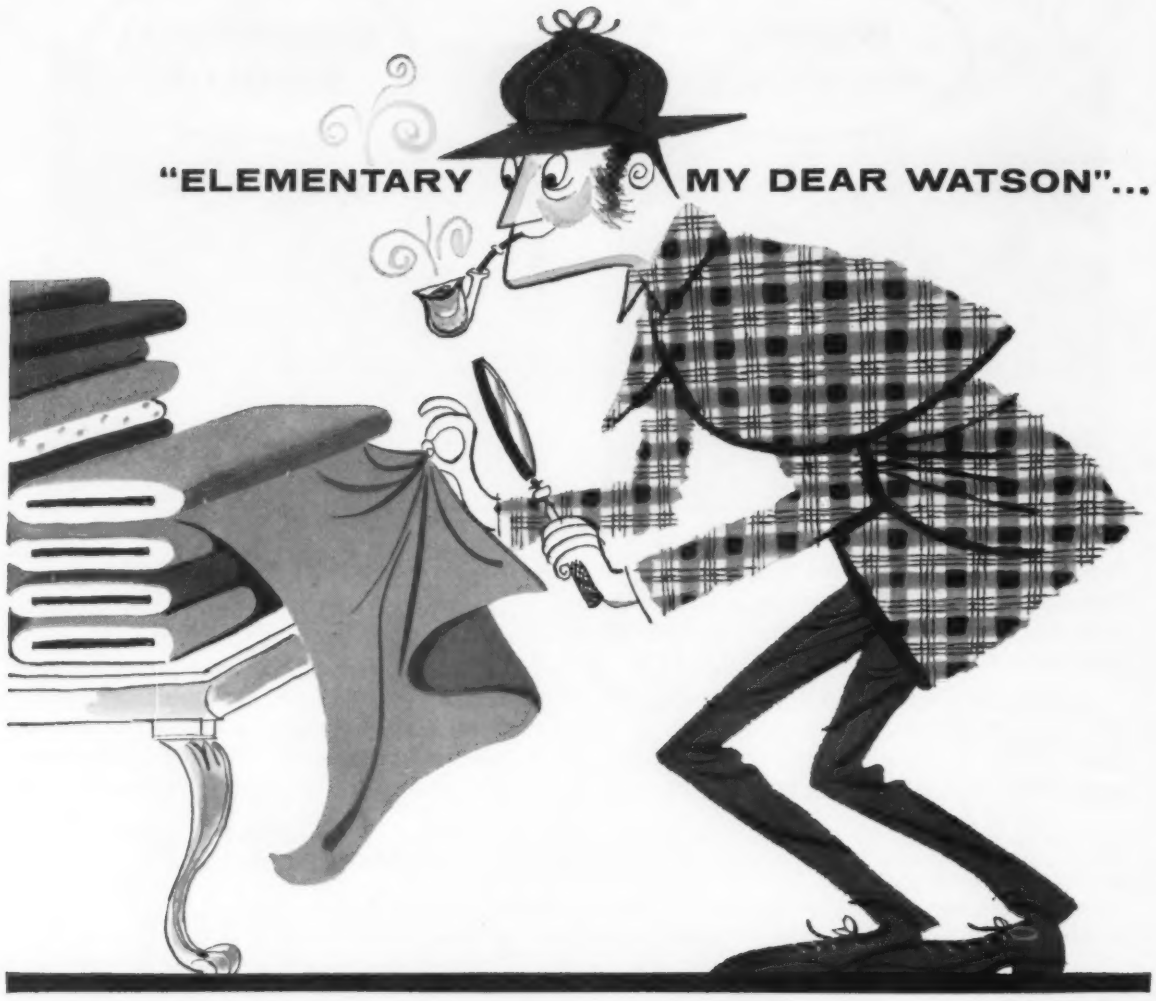
DISTRICT SALES OFFICES: 180 Madison Ave., New York 16, N. Y.; 15 N. Broadway, Des Plaines, Ill.; Western Merchandise Mart, Room 478, San Francisco, Calif.; P. O. Box 1414, Charlotte 1, N. C.; 200 Boylston St., Chestnut Hill 67, Mass.; 3130 Maple Drive N. E., Atlanta 5, Ga.

EXPORT SALES: Amcel Co., Inc. and Pan Amcel Co., Inc., 180 Madison Ave., New York 16, N. Y.

IN CANADA: Chemcell Fibres Limited, 1600 Dorchester Street West, Montreal, Quebec.

Arnel . . . a *Celanese* contemporary fiber





CLINTON Corn Starches give a more uniform application of size

Clinton Corn Starches provide uniform application of size and increased starch penetration for smooth warps and minimum shedding at the slasher and loom. See your Clinton salesman today.

CLINTON TECHNICAL SERVICE is freely available upon request.

CLINTON

CLINTON CORN PROCESSING COMPANY, CLINTON, IOWA

that both wet and dry crease recovery must be improved to give good tumble-dry wash-wear properties to viscose rayon and to other cellulosic fibers such as cotton or high wet modulus rayon.

Slide 2 shows how different combinations of properties can be obtained by chemical treatment. This slide is a key to the treatments involved in the first slide. In *Slide 2*, the crosses at the lower left represent untreated fabrics run as controls; the solid black circles are applications of simple urea-formaldehyde precondensates of varying formaldehyde-urea ratio; the solid points nearest the bottom of the figure are from samples treated with monomethylol urea.

With increasing formaldehyde content, the ratio of wet-to-dry crease recovery rises as dimethylol urea is approached, which gave the highest filled circle shown in the "5" wash-wear region.

Urea-formaldehyde condensates of low formaldehyde-to-urea ratio are not very efficient cross-linkers. Monomethylol urea probably produces for the most part grafted side chains of resin with little or no cross-linking.

The open circles, scattered along the diagonal of the chart, represent samples treated with dimethylol ethylene urea reacted under dry curing conditions to produce intermolecular cross-linking. For maximum wash-wear ratings with dimethylol ethylene urea, enough material must be added to raise dry and wet crease recovery to the minima indicated by the contour lines. Other cross-linking reagents such as formaldehyde give a similar effect.

Two techniques were used to obtain samples with points above and to the left of the diagonal of this chart. In one, the fabric is swelled in caustic soda and treated with resin so that swelling effect is not completely reversed.

This achieves high wet crease recovery but only a slightly raised dry crease recovery. Similar properties can be obtained by cross-linking cellulose in a concentrated aqueous solution of formaldehyde with acid catalyst.

To yield an improved wet-to-dry crease recovery ratio, surface resin, such as lightly condensed aminoplasts, can be combined with dimethylol ethylene urea. The cluster of black triangles in Slide 2 represents samples of fabrics treated with this combination.

Slide 3 represents generalizations about how to attain the various wet-to-dry crease recovery ratios. Covalent intermolecular cross-links increase both wet and dry crease recovery to give good tumble-dry wash-wear ratings. Examples of materials which form intermolecular cross-links are dimethylol ethylene urea formaldehyde and melamine and triazone resins.

Cross-linking the fiber in a wet, swollen condition gives a higher proportion of intramolecular bonds to result in high wet-to-dry crease recovery ratios, shown in upper left hand corner of the map. The caustic pre-treatment of rayon followed by treatment with aminoplast resin, or the Belfast treatment on cotton, fall into this region.

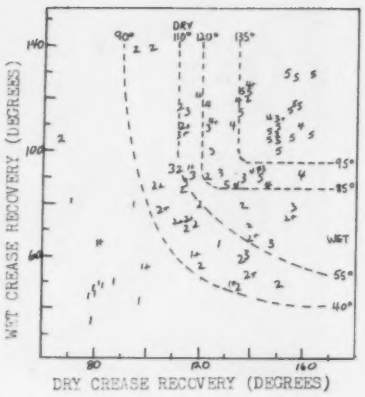
Water sensitive interactions such as those formed by urea formaldehyde resins of low formaldehyde content give higher dry than wet crease recovery and fall into the lower right hand corner of the map.

Slide 4 shows the relation of chemical modification methods to the tumble-dry wash-wear rating. The central diagonal portion represents the use of intermolecular cross links such as triazone or dimethylol ethylene urea and produces high wash-wear ratings.

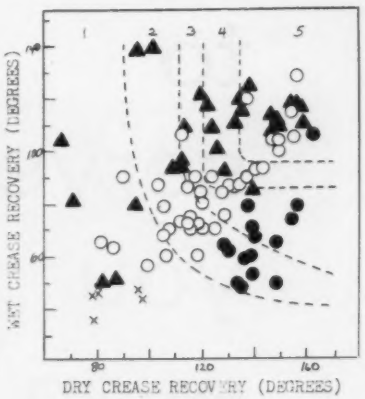
Drying Procedures in Wash-Wear Evaluation. A discussion followed on experimentation which showed how the drying process might affect final appearance of the dried fabric. The technique was simply to crease a wet sample, place it on a wrinkle-recovery tester, and follow its crease recovery as it dried out in a conditioned room.

Drying tests were made on resin treated cotton and rayon at two levels of resin content. It was observed in the cotton experiments that the final crease recovery is substantially above that usually measured under standard dry conditions. Unlike the results obtained on cotton, however, the final crease recovery value of rayon

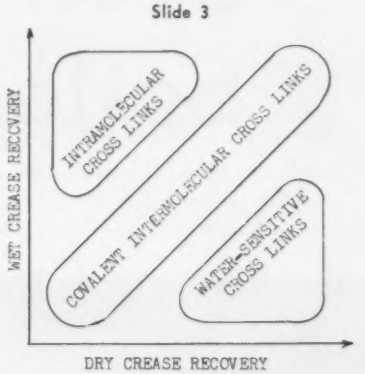
Slide 1



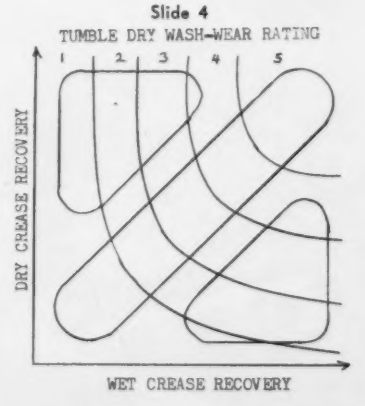
Slide 2



Slide 3



Slide 4



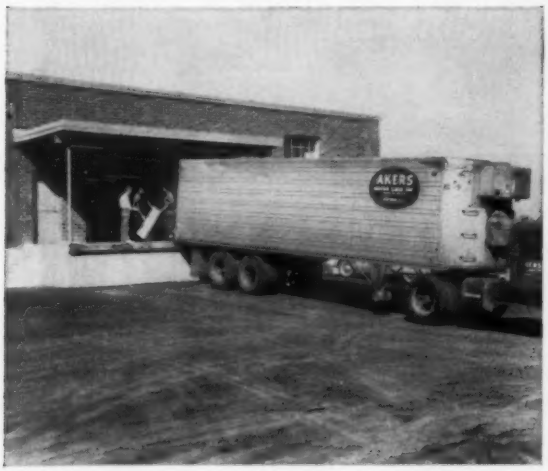
A big new roll shop. Re-covering and buffing of almost any type of roll are done rapidly by skilled mechanics, using buffing machines designed by Armstrong.

to serve you even better

Well-equipped machine shop. Work incident to re-covering various type rolls—and the preparation of loom binder strips—is done on these modern machine tools.

Ample inventory. This is only part of our large stock of Accotex Cots and Aprons. This big inventory helps us to fill your emergency orders on very short notice.

Direct wire service. We're easy to reach by phone or wire (Western Union and Teletype). For quick answers, phone CEdar 3-5302 or call via Teletype GV-6004.



Prompt delivery. Greenville's excellent truck, rail, and air transportation facilities make possible overnight delivery to many points in the textile South.

Bright, attractive new office areas. Efficient personnel keep paperwork flowing swiftly and smoothly to give fast, accurate service on your inquiries and orders.

Here is our new textile facility located in Pleasantburg Industrial Park at Greenville, South Carolina.

It houses a big new roll shop, greatly expanded warehousing and shipping areas, bright, efficient offices.

This new facility makes it possible for us to give you even better service with the full line of Armstrong Accotex textile supplies.

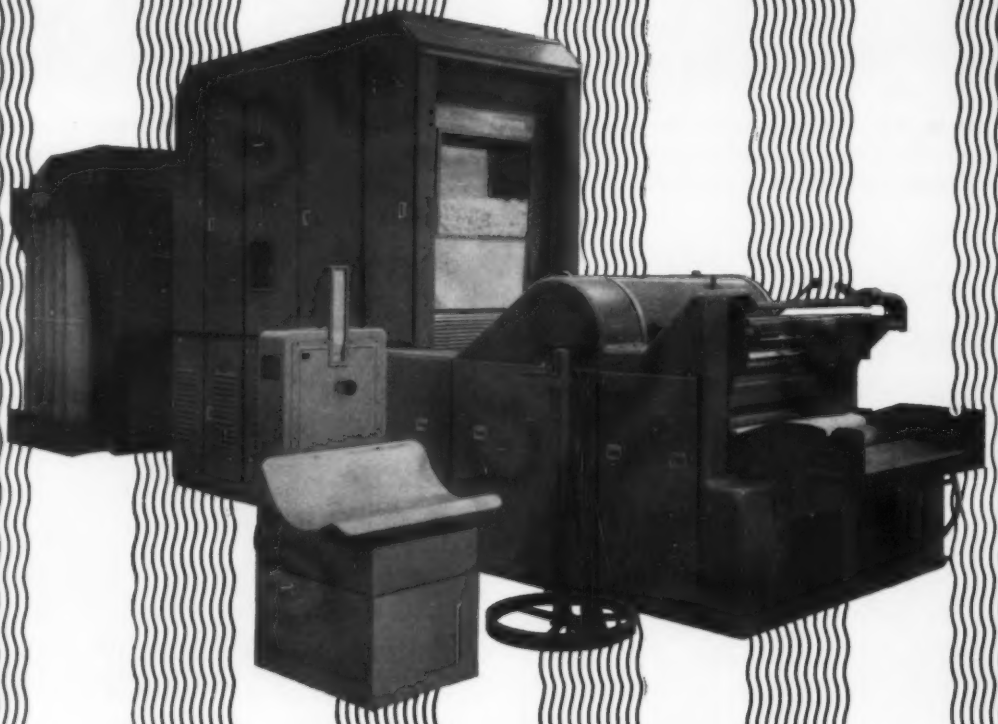
Come see us!

Armstrong

TEXTILE SUPPLIES

1860-1960 Beginning our second century of progress

FOR EVEN LAPS



TRÜTZSCHLER

CONDENSER KSL / HOPPER FEEDER KS / PICKER AND AUTOMATIC LAP MACHINE SMVA

Complete Opening Equipment for Cotton, Synthetics and Waste
Specialists for 60 Years in Cotton Opening Equipment

Welcome to Trützschler's Booths 1048-1051/1107/1110 American Textile Machinery Exhibition-International. Atlantic City Auditorium. May 23 THRU 27. 1960. Atlantic City, N. J., U. S. A.

Trützschler & Co., Textilmaschinenfabrik, Rheydt-Odenkirchen, Western-Germany
Ernest L. Frankl Associates, 515 Madison Avenue, New York 22, N.Y.

was no higher than the recovery measured under standard conditions.

In concluding about this phenomenon, Mr. Steele said that during line drying the rayon fabrics do not get the advantage of the increase in recovery which is produced in cotton by some effect of the drying process itself. For this there is no adequate explanation.

Fiber Structure. In this portion of his talk, Mr. Steele discussed how cellulose fibers of different structure fit into the crease recovery wash-wear patterns described earlier. He pointed out that there are quantitative differences in the minimum crease recoveries required for a given wash-wear level. The differences, which were demonstrated by slide on cotton, rayon, and on a high wet modulus rayon, are related to differences in fiber molecular structure.

It has also been found that fiber modification can improve the crease recovery/abrasion resistance relationship of resin treated rayons of high wash-wear ratings. But in concluding Mr. Steele pointed out that while fiber modification can affect property relationships after resin treatment, little work on problems in this area appears to have been done.

S. M. 27 FIBER

Geoffrey V. Lund, head of the Textile Research Laboratory, Courtaulds (Alabama) Inc., presented a paper, "S.M. 27—A Man-Made High Modulus Cellulosic Fiber," authored by J. Wharton and himself, in which he outlined the course of research his company is pursuing to overcome rayon's traditional limitations.

Because rayon has a low initial modulus when wet, it is easily extended in continuous finishing processes, thus making it almost impossible to produce fabrics which are stable to laundering. Though rayons can be compressively shrunk after resin treatment, the latter process is under such constant cost cutting pressure that a high per cent of commercial fabrics possess unsatisfactory laundering stability.

TABLE 1—Tensile Physical Properties of SM-27, Fibro, and Cotton

	SM-27	Fibro	Cotton
Tenacity (gm/d)			
Dry	3.0 - 3.4	2.5	2-3
Wet	2.1 - 2.5	1.4	2-3
Elongation at break (%)	7	18	5-7
Initial modulus (gm/d)	90	50	40
Fiber elastic recovery (%)	50	40	50
Stress, wet, at 5% extension (gm/d)	1.2	0.1	1.2
Yield point (dry)			
Stress (gm/d)	1.0	.75	—
Strain (%)	1.5	1.5	—

Investigation into this problem of fabric instability revealed that the degree of progressive shrinkage of cellulosic fabrics was highly dependent on the Hookean modulus of the fibers when wet. This suggested that a fiber with a Hookean modulus of about 0.6 gpd at five per cent extension, when wet, would not shrink progressively in fabric form. Such a fiber would approach the behavior of cotton, which has a high Hookean modulus and therefore can be vat-dyed continuously, and then progressively shrunk for lasting stability.

It was also clear that a regenerated cellulose with a higher initial modulus than rayon at normal relative humidities would be likely to produce fabrics with an inherently firmer hand.

Another limitation of rayon, not overlooked in Courtaulds' research program, was the high swelling of rayon in the dilution phase of mercerization—to a gel of low physical strength.

The key to the work which produced S.M. 27/SC 28, Courtaulds' new fibers, was found in the work of Dr. Shozo Tachikawa, a Japanese who developed a process for a fiber of high Hookean modulus when wet, of higher Hookean modulus when dry, and a higher degree of polymerization. Though Courtaulds' fibers are made by a process differing from Dr. Tachikawa's, they are very similar in properties to his fiber.

Table 1 lists the tensile physical properties of S.M. 27, Fibro, and cotton.

Mr. Lund demonstrated with slides the round profile of the new fiber, its pertinent properties contrasted with those of normal rayon, and then compared its properties, in fabric form, with cotton.

In relaxation and progressive shrinkage, S.M. 27 behaves similarly to cotton. With respect to its behavior in continuous processes, plain weave fabrics of the fiber were vat dyed and compressively shrunk to three to five per cent shrinkage. A similar trial in a tight twist gabardine failed.

After immersion in caustic soda of varying concentration, the fiber retained a great part of its strength, and fabrics have been successfully mercerized at caustic concentrations of 6 to 18 per cent to acquire a luster, greater stability, and a high wet crease angle.

The dry and wet moduli of S.M. 27 are sufficiently high to reduce the "elevator effect" of draperies (change in length under conditions of changing relative humidity) in a normal bark cloth to less than one per cent.

In some finishing operations, the fiber's behavior is not similar to cotton. It cannot be bleached by hydrogen peroxide without tendering. But it can be bleached by sodium hypochlorite.

Its dye affinity lies between cotton and normal viscose rayon. And dye fastness properties are similar to those on rayon.

In resin finishing, the higher degree of crystallinity gives it more of a cotton-like behavior. In direct contrast to cotton, however, S.M. 27 suffers little or no loss in strength upon resin treatment.

In common with all fabrics made from cellulosic fibers, there is loss in resistance to abrasion on cross-linking. The production of fabrics with a high crease recovery angle, wet and dry, and consequently with a good wash and wear rating is possible by the combined treatment of mercerization and cross-linking.

In concluding, Mr. Lund stated that S.M. 27 was not an ideal, all purpose fiber. It would very likely benefit by blending with other fibers.

Dary RING TRAVELERS . . .

SINCE 1898

THE DARY RING TRAVELER CO.

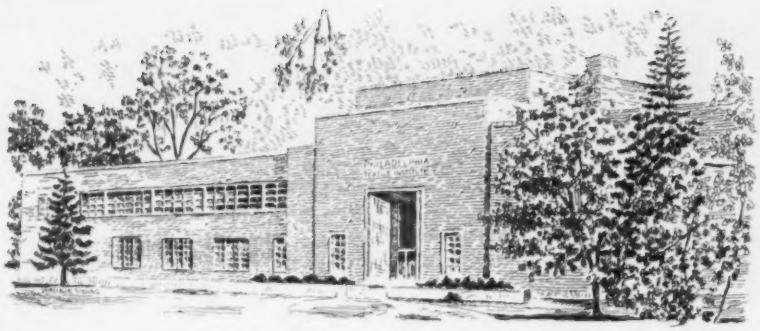
TAUNTON, MASSACHUSETTS

LINDSEY I. PHILLIPS, Treasurer, Taunton, Mass.

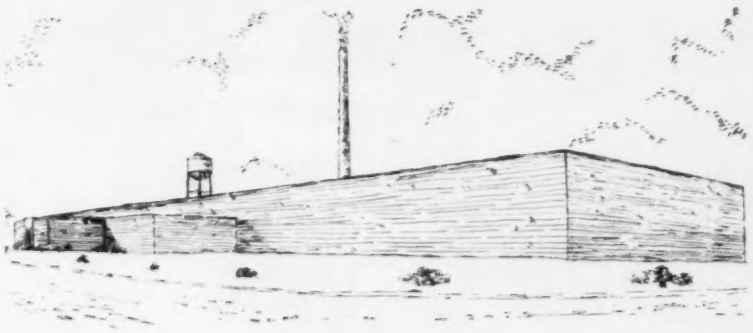
Consult your friendly Dary Representative:

JOHN H. O'NEIL ..... Box 720, Atlanta, Ga.
JAMES H. CARVER ..... Box 22, Rutherfordton, N. C.
CRAWFORD "JACK" RHYMER Box 2261, Greenville, S. C.

551-O



Are the textile colleges meeting the challenge of educating men for a changing industry? Should their objectives be reappraised? Officials of 88 firms give their views



Textile executives discuss education

by Bertrand W. Hayward
President
Philadelphia Textile Institute

Exclusive

RECENTLY, as a follow through on the original Arthur D. Little survey of textile college education,* we conducted a letter survey under our own auspices.

The letter sent to industry follows:

This is the 75th anniversary of textile education in the United States. In 1884 the Philadelphia Textile Institute was founded. Now Philadelphia Textile Institute is an accredited, degree-granting college. Increasingly our graduates go on to advanced study at leading universities. Since 1884 we have been joined by other outstanding textile schools where graduates are also effectively developed for the textile industry.

The enrollment situation in all textile colleges is such that a clarification of objectives for the next 75 years seems essential.

As an outstanding executive in the textile industry would you prepare a statement for us as to the type of education preparation you want for prospective management personnel? What do you believe the education objectives of textile colleges should be to best meet your needs? Perhaps you would like to have your top personnel man comment also.

Education is an important national problem. The specialized colleges for textiles are inevitably a part of this great problem. Help from great industrial leaders is needed. This letter asks only for advice. We hope you will be willing to share your thoughts with us.

This was followed by a second letter in cases where replies were not immediately forthcoming:

There is enclosed a carbon copy of a letter we sent to you as dated. Since we particularly wanted your reactions we hope you may now find it convenient to reply or have someone in your organization send his comments to us.

We have been very pleased by the careful and interested replies from forty-six of the companies we asked. Many of the ideas and suggestions in these letters will be valuable to our trustees and faculty as we plan our future to serve you even better.

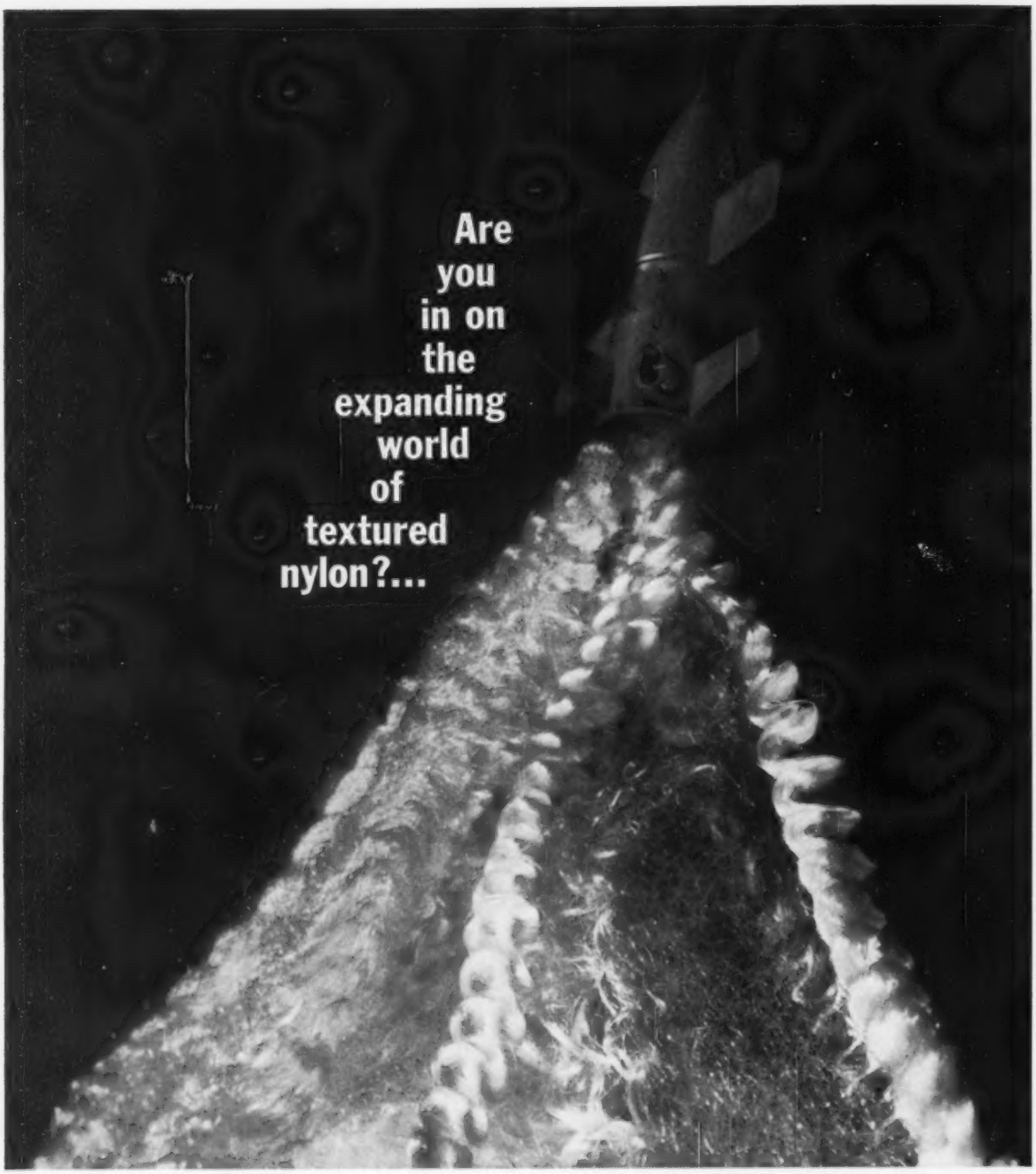
We hope that you will, please, join other leading executives who have been kind enough to write to us with obvious interest and concern.

As a result, we received 88 replies from 128 requests. This is a remarkably fine response to any survey, even one as general as the above clearly is.

TEXTILE COLLEGE education cannot be considered in isolation from the total problem of education in our modern society. Consequently, we need to review the complete problem and consider our textile executive comments as part of this major problem if we are to deal with the topic honestly and effectively.

Discuss "freedom" with a Russian, and you will find that you and he hold widely divergent meanings for this term. The discussion becomes fruitless because of the different definitions, the different premises. Discussions on education among Americans suffer from similar difficulties. Although we all use the term "education" freely, to each of us the term has different meanings. Thus it is that papers, books, articles are usually vigorously phrased propositions promoting the definition of an author who is a bitter opponent of anyone holding a viewpoint other

*Sponsored by the National Council for Textile Education and made possible by a contribution from Burlington Industries.



Inter-textures . . . Multi-textures . . . Space Treatments . . . Mirror-effects are just a few of the new words finding more frequent use in forward-thinking textile mills. They describe new achievements made possible because of mill men, designers and stylists with vision who have seen the potential in one specific yarn—Textured Caprolan nylon—and made the most of it. How this tough continuous filament nylon can help *you* enjoy new opportunities is a story we'd be happy to review with you at the American Textile Machinery Show at Atlantic City.

Speaking of new horizons: see them shape up before your eyes right at the show as Textured Caprolan is put through Cobble Bros.' new electronic tufting machine. Needles are individually controlled to create a greater variety of carpet patterns than ever before. It's one more proof that the revolutionary nylon yarn made for revolutionary textile machinery is . . .

Allied Chemical

See our display at Atlantic City, Booths 36 and 36A

Fiber Marketing Dept., 261 Madison Avenue, New York 16, N. Y.

TEXTURED caprolan®

NYLON FIBER BY ALLIED CHEMICAL

than his own.

When you can choose your own definition of any topic and no one is too certain what, exactly, you are talking about; then, whether you are an admiral or a bootblack, you become an expert on that topic. The definition, the premise, is peculiarly your own; so you alone are expert. This is how it is possible for "life adjustment" to mean a sound, psychological study of the individual learner, or to be a phrase that describes a hopeless hodge-podge of flighty nonsense.

No matter what college presidents, professors, trustees, superintendents of schools or, for that matter, admirals, may think, education is an investment by all or some of the people for the preservation or, sometimes, the improvement of the group providing the funds. This includes our belief that the group profits through the development of the individual to a high level of excellence. It does not preclude the possibility of educational leadership modifying the viewpoints or methods approved by the investors. On the contrary, it demands it because without good results funds will be too little for adequate programs.

The content of education was not carved in rock by the finger of God. It is a result of groups of people planning to meet their present and future needs. The seven liberal arts are not exclusively, finally, and authoritatively the only possible content for education. Only recently, in a conference at the University of Michigan, scholar after scholar warned against attention to the sciences and against language merely for "use," until Sir Charles K. Webster, former president of the British Academy, was moved to suggest that maybe the speakers attacking science knew very little about the subject and that they were as one-sided and dangerous as scientists who were unaware of the great contributions of ancient cultures and civilizations to our society.

No group is the sole repository of an esoteric body of subject matter which alone makes up education. A humanist is worthy of re-

Continued on page 257

Textile and Allied Industry Firms and Officials Participating in Survey

Aberfoyle Manufacturing Co., Philadelphia, Pa. — William T. Galey III

Aldan Rubber Co., Philadelphia, Pa. — Albert K. Dannenbaum

Allied Chemical Corp., New York, N. Y. — C. M. Brown

American Cyanamid Co., New York, N. Y. — Kenneth C. Towe

Amerotron Co., Aberdeen, N. C. —R. M. Cushman

Artloom Industries, Inc., Philadelphia, Pa. — Frank D. Dodds

Asbestos Textile Institute, Philadelphia, Pa. — Myril C. Shaw

Avondale Mills, Inc., Birmingham, Ala. — Donald Comer

Ballymean Woolen Mills, Inc., Baltimore, Md. — W. J. Dickey

Joseph Bancroft & Sons Co., Wilmington, Del. — W. Ralph MacIntyre

Berkshire Knitting Mills, Reading, Pa. — Richard C. Wentzel

Bloomingdale's, New York, N. Y. — Vincent P. Brennan

Botany Industries, Inc., Passaic, N. J. — Stanley M. Finkel

Brenham Cotton Mill, Inc., Brenham, Tex. — R. T. Staples

Robert Bruce, Inc., Philadelphia, Pa. — Harold L. Neuman

Callaway Mills, Inc., New York, N. Y. — A. N. Fagnani

Cannon Mills Co., Kannapolis, N. C. — J. H. Cannon

William Carter Co., Needham Heights, Mass. — Lyndall F. Carter

Catalina, Inc., Los Angeles, Calif. — John E. Watte, Jr.

Chatham Manufacturing Co., Elkin, N. C. — Ralph Howland

Collins & Aikman Corp., New York, N. Y. — R. W. McCullough

Cohn-Hall-Marx Co., New York, N. Y. — Merwin R. Haskel

Cone Mills, Inc., New York, N. Y. — William Brayer

Cranston Print Works Co., Cranston, R. I. — Godfrey R. Rockefeller

Dearnley Bros. Worsted Spinning Co., Inc., Philadelphia, Pa. — Charles E. Dearnley

Deering-Milliken & Co., New York, N. Y. — J. C. Harris

Dow Chemical Co., Midland, Mich. — David H. Morgan

Dundee Mills, Inc., Griffin, Ga. — J. M. Cheatham

Duplan Corp., New York, N. Y. — Friedlanger

E. I. du Pont de Nemours & Co., Wilmington, Del. — Bettina F. Sargeant

Erwin Mills, Inc., Durham, N. C. — William H. Ruffin

Faribault Woolen Mill Co., Faribault, Minn. — Robert W. Klemer

Fieldcrest Mills, Inc., Spray, N. C. — H. W. Whitcomb

Fulton Cotton Mills, Inc., Atlanta, Ga. — Clarence E. Elsas

Granite Hosiery Mills, Inc., Souderton, Pa. — L. Clemmer

Louis Goldsmith, Inc., Philadelphia, Pa. — Joel J. Sternberg

Guilford Woolen Mills, Co. Inc., Guilford, Me. — Merle P. Finley

Hellwig Dyeing Corp., Philadelphia, Pa. — Jacob Knup, Jr.

F. C. Huyck & Sons, Rensselaer, N. Y. — Roderick T. Clarke

Jantzen, Inc., Portland, Ore. — Paul DeKoning

Cyril Johnson Woolen Co., Stafford Springs, Conn. — David P. Mitchell

Kent Manufacturing Co., Clifton Heights, Pa. — William Kent

Lebanon Woolen Mills, Lebanon, Tenn. — Howard K. Edgerton

Livingston Worsted Mills, Inc., Holyoke, Mass. — Walter Davis

Louisville Textiles, Inc., Louisville, Ky. — A. H. Dick

Mohasco Industries, Inc., Amsterdam, N. Y. — Warren C. LaBahn

Munsingwear, Inc., Minneapolis, Minn. — Laurens D. Dawes

National Aniline Div., Allied Chemical Corp., Hopewell, Va.— W. H. Maguigan

Native Laces & Textiles, New York, N. Y. — Ira Birnbaum

Plymouth Cordage Co., Plymouth, Mass. — John W. Searles

Reeves Bros., Inc., New York, N. Y. — J. D. Moore

Riegel Textile Corp., New York, N. Y. — German H. H. Emory

Russell Manufacturing Co., Alexander City, Ala. — Lem Coley

Samson Cordage Works, Boston, Mass. — Arthur F. Chace, Jr.

Snellenburgs Co., Philadelphia, Pa. — Alfred Blasband

Springs Mills, Inc., New York, N. Y. — Robert Amory

J. P. Stevens & Co., Inc., New York, N. Y. — Robert T. B. Stevens

Swift Manufacturing Co., Columbus, Ga. — C. H. Williams

Tennessee Eastman Co., Kingsport, Tenn. — James C. White

Union Knitting Mills, Philadelphia, Pa. — Gideon A. Frankl

U. S. Rubber Co., New York, N. Y. — T. J. Kiernan

West Point Manufacturing Co., West Point, Ga. — I. L. Murray

The following also replied briefly:

Bibb Manufacturing Co., Macon, Ga. — Mrs. E. S. Webb

W. J. Dickey & Sons, Oella, Md. —W. J. Dickey

Ely & Walker Dry Goods Co., St. Louis, Mo. — R. F. Clement

Fairchild Publications, Inc., New York, N. Y. — Louis Fairchild

International Latex Corp., New York, N. Y. — R. B. Runyon

Keasbey & Mattison Co., Ambler, Pa. — R. R. Porter

Proctor & Schwartz, Inc., Philadelphia, Pa. — M. H. Strakay

St. Marys Woolen Manufacturing Co., Inc., St. Marys, O. — W. J. Kishler

John B. Stetson Co., Philadelphia, Pa. — David H. Harshaw

Stoffel & Co., New York, N. Y. — Max Fischer

United Elastic Corp., Easthampton, Mass. — H. W. Conant

United Merchants & Manufacturers, Inc., New York, N. Y. — Merwin R. Haskel

Van Raalte Co., Inc., New York, N. Y. — T. J. Griffis

What you should know about STARCH*

YOU PROBABLY KNOW—BUT OTHERS MAY NOT

Maximum Number Ends Per Size Box

As discussed in a previous article on slashing, a mistake which sometimes occurs is the crowding of too many ends across the face of the size box squeeze roll or rolls. This will always result in a poorly sized warp.

A simple calculation using available known data will help in reaching a decision regarding the maximum number of ends that can be efficiently sized per size box.

From a practical experience, it is a good rule to limit the number of ends per size box so as to allow a certain amount of space between each and every end. This space between ends should be at least equal to the diameter of the ends. In other words, for example, if the ends across the width of the squeeze rolls form a solid sheet by touching each other, then every other end, or one-half of the total number should be removed for best results. Therefore, an indication of the maximum number of ends per size box can be easily determined by the following formula:

$\frac{1}{2}\left(\frac{W}{D}\right)$ = Maximum number ends per size box

where, W = Available sizing width in inches of squeeze roll.

D = Yarn diameter in inches.

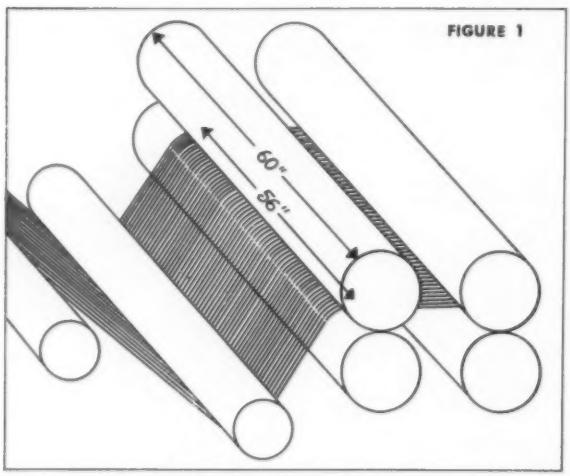


FIGURE 1

Four-thousand ends (#30 yarn) should go into size box with 60-inch squeeze roll. This leaves space between each end equal to diameter of yarn.

MAXIMUM NUMBER ENDS PER SIZE BOX VS YARN NUMBER

(Size Box roll width—60"—Available sizing width—56")

Yarn No.	Average Diameter In Inches	Maximum No. ends for Most Efficient Sizing
10	.01209	2,316
15	.00990	2,828
20	.00855	3,306
30	.00700	4,000
40	.00606	4,620
50	.00541	5,176

TABLE NO. 1

Table 1 lists the average diameter in inches for some of the most common yarn numbers. Total number of ends per size box for maximum sizing efficiency are calculated from the above formula where W = 56 inches (See Figure 1).

In determining the maximum number of ends per size box, neither the number of squeeze rolls nor the number of immersion rolls have any influence. Only the available sizing width per box and yarn diameter need be considered.

One of a series of articles. For the complete set and for our continuing technical data service, write without obligation to:

THE HUBINGER COMPANY

601 Main Street • KEOKUK, IOWA

Choosing the Best Draft

Mills can use this study to more profitably balance the factors of cost and quality in allocating drafts from picking through spinning

by Jack Simpson, Arsema T. Callegan, and C. L. Sens

Southern Regional Research Laboratory[1]

Exclusive

*Part 1—Medium Staple Cottons**

ONE OF THE oldest and most difficult problems that has beset the textile industry is that of determining the allocation of drafts required between the various drafting processes to obtain maximum yarn uniformity and strength. One of the main difficulties encountered by mills in solving this problem has been the great amount of testing required at the sacrifice of production.

For this reason most mills have either maintained their original draft allocations or have made small changes at selected processes without undertaking an over-all study from picking through spinning. This fact is brought out in a study (5)[2] involving seventeen mills making an 80 x 80 print cloth with approximately a 30/1 (20 tex) warp and a 40/1 (15 tex) filling yarn from similar cottons.

From this study it appears that there were almost as many different drafting organizations as there were mills participating. While allowance is made for mills to adjust their drafting organizations to their own particular economy, it seems only logical to assume that their draft allocations should follow a more similar pattern.

A knowledge of the optimum allocation of drafts from picking through spinning to produce yarns of maximum quality might well enable mills to more profitably balance the factors of cost and quality, thus increasing cotton's competitive position with other fibers.

There are many instances of different phases of the study of draft allocation reported in the literature (3, 6, 7, 9, 10) but none seems to have pursued the over-all problem as far back as picking.

A study of spinning, roving, and drawing frame drafts (6) showed that drawing frame drafts from four to eight, and roving frame drafts from eight to sixteen did not appreciably affect the strength or grade of a 15.75/1 (37 tex) carded yarn. On the other hand, it was found that increases in spinning draft from 12 to 25 had an adverse effect on yarn strength.

In another study (5) a trend was reported of increasing strength with decreasing spinning draft for 30/1 (20 tex) warp and 40/1 (15 tex) filling yarns, but no correlation was found between the drafts used at the carding, drawing, and roving processes and the strength index of yarn.

In two other studies (3, 7) the problem was attacked in a more theoretical manner. In one of these studies (7), from the statistical theory of the distance between fiber ends before and after drafting with rolls, a drafting formula was derived. With use of this formula

Here Are the Important Findings from This Study

► There are definite draft allocations, from picking through spinning, required to obtain the best possible yarn uniformity, strength, and elongation.

► The most significant trend observed for the processes before spinning was that a light-weight second drawing sliver produced the most uniform 0.50- through 6.00-hank rovings.

► Spinning draft has more effect on yarn uniformity and strength than the other processes, but the other processes do have a significant effect.

► In some cases, and up to a certain point, yarn quality can be improved by increasing the draft.

[1]One of the laboratories of the Southern Utilization Research and Development Division, U. S. Department of Agriculture, Agricultural Research Service. It is at New Orleans, La.

[2]Numbers in parentheses are references at the end of this article.

*Part 2, dealing with short staple cotton, will appear in a subsequent issue of TEXTILE INDUSTRIES.

TABLE 1. Fiber Properties of the Samples of Cotton Varieties

Cotton Variety Sample	Classer's Evaluation		Fiber Length and Distribution (Fibrograph)					
	Length In.	Grade	UHM In.	Mean In.	Uniformity Ratio %	Micronaire[1] Reading Unit	Strength[2] Index	Maturity[3] %
Deltapine 15	1 3/32	M	1.02	0.83	86	4.30	7.80	86
Coker 100 Wilt	1 1/8	SM	1.05	0.86	82	4.64	7.89	89
Acala 4-42	1 1/16	M	1.08	0.86	80	4.29	7.97	76

[1]Curvilinear scale
[2]Pressley method "zero gauge"
[3]Random maturity NaOH method

an optimum spinning plan or draft allocation was outlined.

This method gives valuable information, especially on the optimum spinning draft, and the advantages obtained from spinning from either single or double roving. The disadvantage of this method is that the theory is based on roller drafting and, therefore, cannot be used for calculating the best weight card sliver and picker lap.

In the other study (3), drafting equations for the intermediate and spinning frame were obtained by plotting relative variances against draft for a number of yarn and roving counts.

The use of drafting curves (draft plotted against per cent coefficient of variation of weight per unit length) for each drafting process in the organization was also advocated in another investigation (9). While this method, like those in the other studies (3, 7), theoretically offers a wider range of drafts and doublings from which to select the optimum draft allocation, the number of assumptions and experimental determination of constants make it a very difficult plan to follow.

In making a study on draft allocation there are several other aspects not mentioned above that should be considered. One is the effect that the staple length of the cotton has on optimum draft allocation, as staple length was found (12) to be the most important fiber property when considering draft distribution between zones of the roving frame.

Another factor to be considered is the effect that growth area of cottons might have on their physical properties and their affect on draft allocation.

After a thorough study of the several methods mentioned, it was decided that a direct approach without too many theoretical considerations was the most practical method to use at this time to obtain an approximation of the optimum draft allocations from picking through spinning.

It was decided that the study should embrace three staple lengths of cotton: short, medium, and long. The short and long staple groups would each have two cottons from different areas of growth, while the medium staple group would have three cottons from different areas of growth. The report of this investigation will be divided into three parts, each part reporting on a particular staple length group. This first report will be concerned with the medium staple cottons.

MATERIALS AND METHODS UTILIZED

Sample of Cotton Varieties. The varieties of medium staple cottons used in this investigation along with their respective fiber properties are listed in *Table 1.*

Drafting Systems. The drafting systems investigated were the Whitin[3] two-process picker and revolving flat top card, the Medley and Saco-Lowell four-roll drawing frames with cushion-top rolls and a tension draft in the middle zone, the Whitin 10″ x 5″ Interdraft and 8″ x 5″ Superdraft roving frames, and the Whitin Long-Draft (double apron) 4.50″ gauge and 3.50″ gauge spinning frames.

The Casablanca apron cradles used were "Type DD7" 54 mm width, leather aprons. The spindle speeds, ring size, and traveler weights used in spinning are listed in *Table 2* and were selected from general spinning practice of this Laboratory.

The roll settings for the drawing, roving, and spinning frames were those recommended by the machinery manufacturers. The zone draft distributions used at the roving frames were those developed in a previous study (12). The manufacturer's break draft was used in spinning as previous tests have indicated it to be optimum for the drafting systems employed.

Test Methods. The Saco-Lowell sliver tester converted to electrical recording (4, 8) was used to

[3]Use of a company and/or product name by the Department does not imply approval or recommendation of the product to the exclusion of others which may also be suitable.

TABLE 2. Summary of Spinning Conditions

Yarn Count CC	Yarn Count Tex	Ring Dia. In.	Spindle Speed rpm	Traveler Wt gr
10	59	2¼	6300	2.00
20	30	2¼	6300	1.00
30	20	2¼	6300	0.525
40	15	1½	8700	0.375
60	10	1½	7700	0.300
70	8	1½	7700	0.250

Visit us in Atlantic City, Booth 295, May 22-27, and Atlantic Suite, Hotel Dennis

Improve quality–

lower handling costs with...

GLOBE®

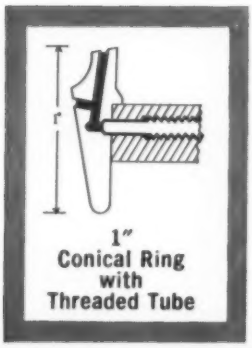
easy flow starch

WRITE OR PHONE

Corn Products for expert technical assistance... helpful data on these products for the Textile Industry

GLOBE® · EAGLE® · FOXHEAD® · TEN-O-FILM® and CLARO® starches · GLOBE® · EXCELLO® dextrines.

CORN PRODUCTS DIVISION CORN PRODUCTS SALES COMPANY · 9 East 55 Street, New York 22, N. Y.



1″
Conical Ring
with
Threaded Tube

We specialize in

Engineered Rings for Automatic Lubrication

Metered and Timed

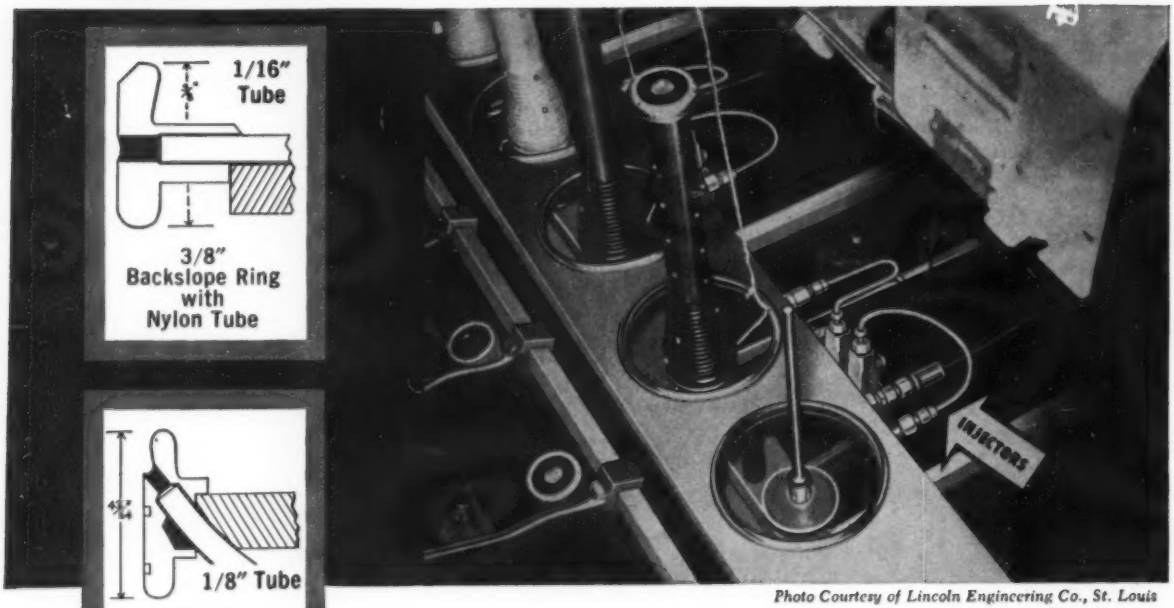


Photo Courtesy of Lincoln Engineering Co., St. Louis

1/16″
Tube

3/8″
Backslope Ring
with
Nylon Tube

1/8″ Tube

43/64″
Multigroove Ring
with
Nylon Tube

The automatic centralized lubrication systems installed by Lincoln and Alemite are designed for utmost precision . . . supplying lubricant to the rings in amounts which can be metered to .0002 oz. . . . at intervals timed to predetermined cycles which can be varied as the running of the work dictates. Thus the system delivers the lubricant at the ring with high precision . . . but the ring then has to deliver it to the traveler.

At DIAMOND FINISH we have developed the tooling and quality controls to assure a perfect seal with the various types of intake fittings . . . and what is equally important, to assure truly effective lubricant distribution over traveler contact areas. (examples at left are merely typical — we can accommodate any type fitting).

To obtain rings for centralized automatic lubrication, take advantage of our proven methods which are operating with outstanding success on wool and worsted, rayon, synthetics, glass, paper, asbestos and other fibers.

WHITINSVILLE (MASS.) SPINNING RING CO.

Makers of Spinning and Twister Rings since 1873

DIAMOND FINISH

W. K. SHIRLEY
Representative for
the Carolinas & Va.
P. O. Box 406,
Belmont, N. C.

H. L. WILLIAMS
Representative for
Ala., Ga. & Tenn.
Box 222,
West Point, Ga.

measure card and drawing sliver variation. The thickness of the sliver was measured at one inch intervals within a length of one yard. Twenty one-yard samples constituted a test. Thus the variation was based on thickness measurements at one-inch intervals within a length of one yard. The advantages of this method of measuring evenness in sliver are brought out in another study (9).

The evenness of the rovings of the Deltapine cotton was measured in terms of per cent mean deviations with a Uster evenness tester. After these rovings were tested, a Uster tester with a quadratic integrator was acquired and the evenness of the remaining rovings and yarns of the other cottons was measured in terms of coefficient of variation.

For rovings tested with the linear integrator the between-length measurement was aproximately 0.315 inches and the within-length approximately 2.5 yards. For the rovings and yarns tested with the quadratic integrator the between-length measurement was 0.315 inches and the within-length was 3 to 5 yards. A total of 20 samples for each test or replicate was used for both roving and yarn.

The methods of the American Society for Testing Materials were followed in determining the fiber properties (1) and in making the yarn tests for number and skein strength (2). Single strand strength determinations were made on the Uster automatic single strand tester. Ten breaks were made from each of 10 bobbins for yarn numbers below 40/1 (15 tex) and 20 breaks for yarn numbers finer than 40/1, using a 10-second average time to break.

PROCESSING AND SELECTION PROCEDURE

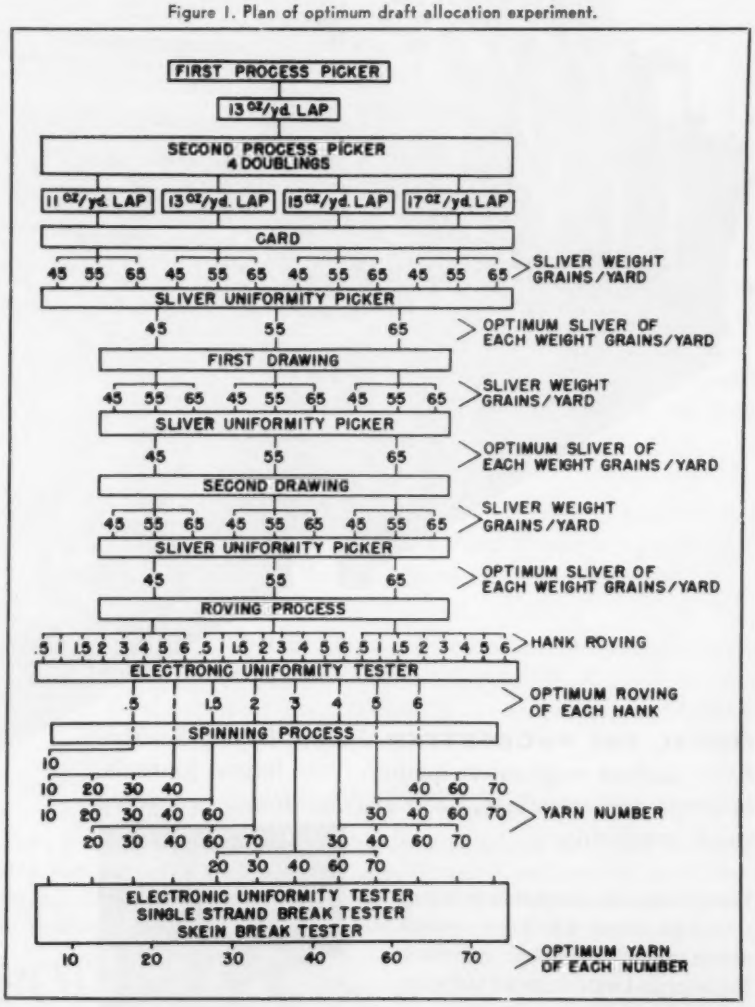
By referring to the diagram in *Figure 1*, the following processing and selection procedure can be easily followed. The finisher picker was selected as a starting point in the study and the weights of picker laps to be processed were 11, 13, 15, 17 ounces/yard (341, 403, 465, and 527 kilotex) which more than covers the range used by most commercial manufacturers. Each weight of finisher picker lap was processed from four doublings of a 13 ounce/yard breaker picker lap on the Whitin two-process picker.

From each weight finisher picker lap 45, 55, and 65 grains/yard (3.2, 3.9, and 4.6 kilotex) card slivers were produced, using a constant card production of 12 pounds/hour. The most uniform card sliver of each weight was selected, doubled six times and processed into 45-, 55-, and 65-grain first drawing sliver. Six doublings were used in the manufacture of both first and second drawing sliver, since it has been shown that this number levels out most of the long term variation in card and drawing slivers (8).

The most uniform 45-, 55-, and 65-grain first drawing was selected and each was processed into 45-, 55-, and 65-grain second drawing. From each of the most uniform 45, 55, and 65 grains/yard second drawing, 0.5-, 1.0-, 1.5-, 2.0-, 3.0-, 4.0-, 5.0-, and 6.0-hank (1181, 591, 394, 296, 197, 148, 118, and 98 tex) rovings were processed.

The 0.5-, 1.0-, and 1.5-hank rovings were processed on the 10″ x 5″ roving frame and the remaining five rovings on the 8″ x 4″ frame. Each of the most uniform 0.50- through 6.0-hank rovings, as was possible within the drafting range of the spinning frames, were proc-

Figure 1. Plan of optimum draft allocation experiment.

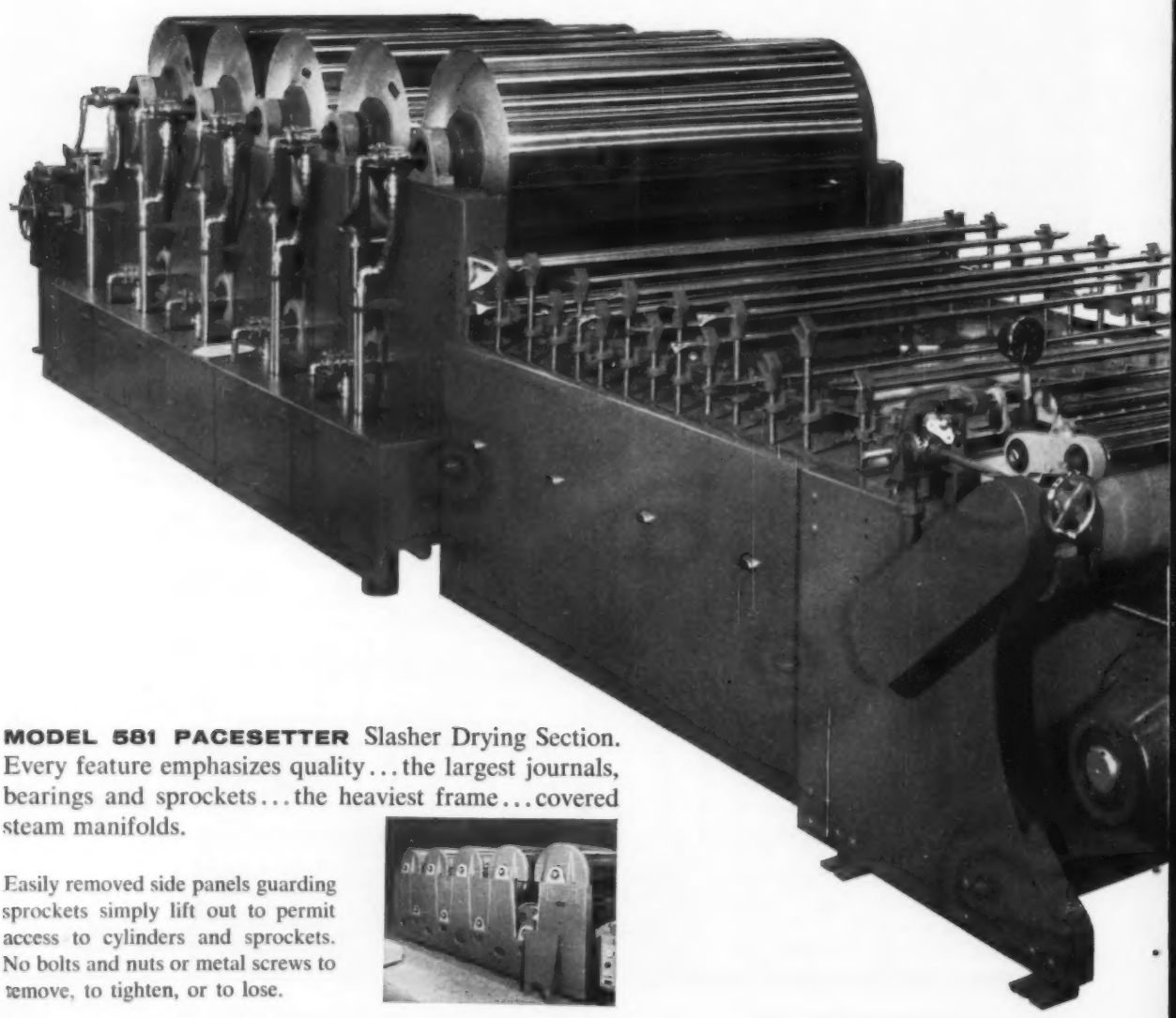

FIRST PROCESS PICKER
13 OZ/yd. LAP
SECOND PROCESS PICKER
4 DOUBLINGS
11 OZ/yd. LAP
13 OZ/yd. LAP
15 OZ/yd. LAP
17 OZ/yd. LAP
CARD
45 55 65 45 55 65 45 55 65 45 55 65
SLIVER WEIGHT GRAINS/YARD
SLIVER UNIFORMITY PICKER
45 55 65
OPTIMUM SLIVER OF EACH WEIGHT GRAINS/YARD
FIRST DRAWING
45 55 65 45 55 65 45 55 65
SLIVER WEIGHT GRAINS/YARD
SLIVER UNIFORMITY PICKER
45 55 65
OPTIMUM SLIVER OF EACH WEIGHT GRAINS/YARD
SECOND DRAWING
45 55 65 45 55 65 45 55 65
SLIVER WEIGHT GRAINS/YARD
SLIVER UNIFORMITY PICKER
45 55 65
OPTIMUM SLIVER OF EACH WEIGHT GRAINS/YARD
ROVING PROCESS
.5 1 1.5 2 3 4 5 6 .5 1 1.5 2 3 4 5 6 .5 1 1.5 2 3 4 5 6
HANK ROVING
ELECTRONIC UNIFORMITY TESTER
.5 1 1.5 2 3 4 5 6
OPTIMUM ROVING OF EACH HANK
SPINNING PROCESS
10
10 20 30 40
40 60 70
10 20 30 40 60
30 40 60 70
YARN NUMBER
20 30 40 60 70
30 40 60 70
20 30 40 60 70
ELECTRONIC UNIFORMITY TESTER
SINGLE STRAND BREAK TESTER
SKEIN BREAK TESTER
10 20 30 40 60 70
OPTIMUM YARN OF EACH NUMBER

THE SPRINGS COTTON MILLS, Fort Mill, South Carolina. Six plants of Springs Cotton Mills run 29 West Point Slashers.

DUNDEE MILLS, INC., Griffin, Georgia. Three West Point Foundry Slashers replaced seven old slashers.

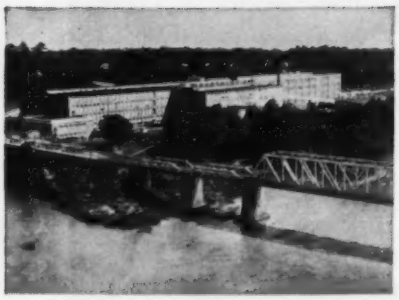
LYDIA COTTON MILLS, Clinton, South Carolina. Two West Point Foundry Slashers replaced four old slashers.

These six pace-setting textile mills are all.



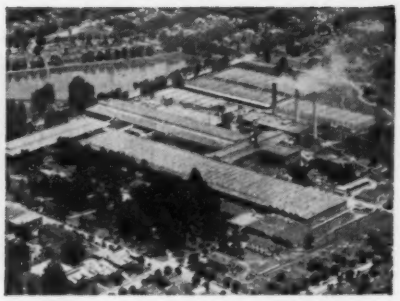
MODEL 581 PACESETTER Slasher Drying Section. Every feature emphasizes quality... the largest journals, bearings and sprockets... the heaviest frame... covered steam manifolds.

Easily removed side panels guarding sprockets simply lift out to permit access to cylinders and sprockets. No bolts and nuts or metal screws to remove, to tighten, or to lose.



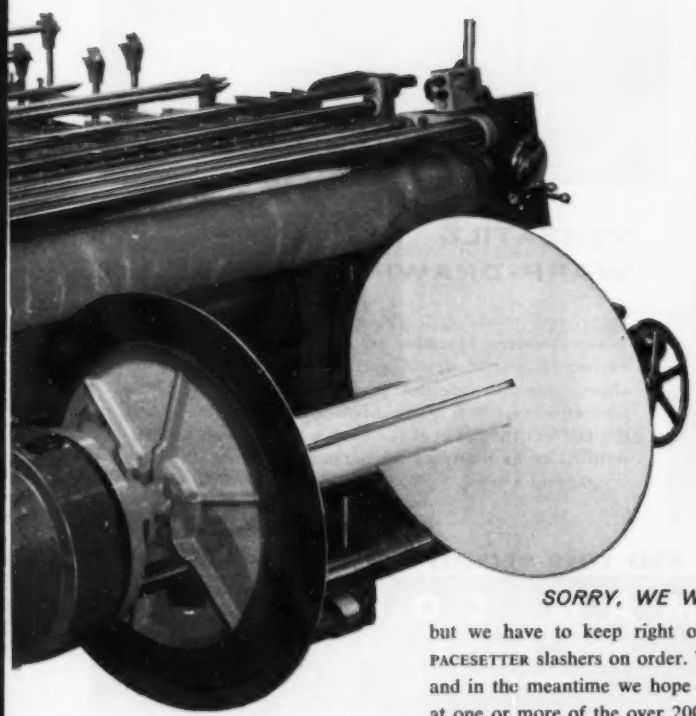
TALLASSEE MILLS of the Mount Vernon Mills, Inc., Tallassee, Alabama. Six West Point Slashers replaced nine old slashers.

PACOLET MANUFACTURING COMPANY, New Holland, Georgia. Five West Point Foundry Multi-Cylinder Slashers in this mill.



CONE MILLS CORPORATION, White Oak Plant, Greensboro, N. C. Five West Point Multi-Cylinder Slashers replace 16 old slashers.

100% WEST POINT



ALL OF THE SIX leading textile mills pictured above have 100% West Point Foundry slasher installations.

ALL OF THE SIX are now slashing their warps on fewer slashers in less slasher hours, realizing lower production costs, savings in floor space, uniform quality and reduced maintenance. In the last four years alone textile mills have installed more than 200 West Point Foundry Multi-Cylinder Slashers.

The fact that these textile leaders have chosen high-capacity West Point slashers is proof positive of the soundness of this investment.

Whether yours is a complete slasher installation or modernization of present equipment, call West Point Foundry . . . *specialists in slashers.*

SORRY, WE WON'T BE WITH YOU IN ATLANTIC CITY,

but we have to keep right on working in West Point to produce the record number of PACESETTER slashers on order. We *will* be with you in October at the Greenville Textile Show, and in the meantime we hope you will let us show you the West Point PACESETTER in action at one or more of the over 200 modern installations made during the past four years.

WEST POINT *Foundry & Machine Company*

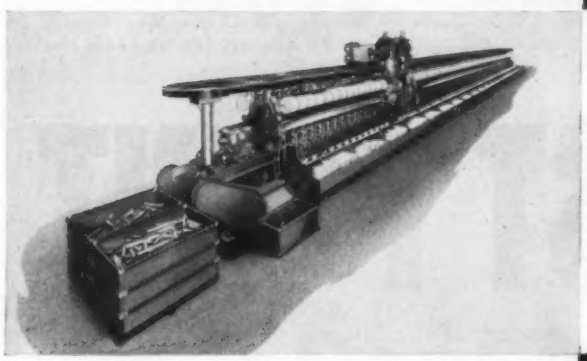
WEST POINT, GEORGIA

BE SURE TO SEE..

BARBER COLMAN

AMERICAN TEXTILE MACHINERY EXHIBITION
ATLANTIC CITY
NEW JERSEY
MAY 23-27, 1960

SPACES 112-114 434-465

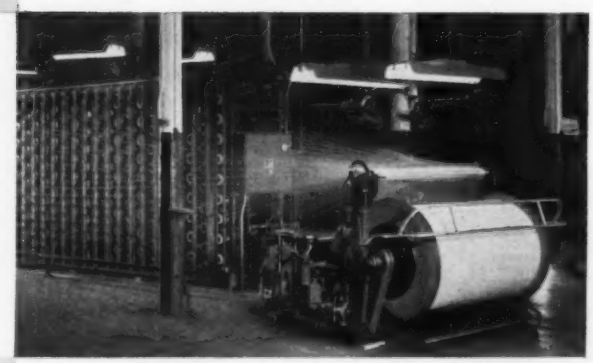


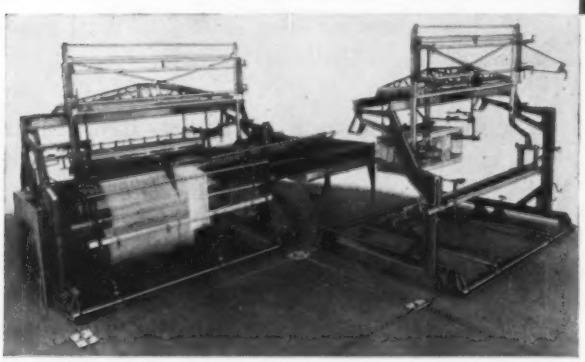
NEW TYPE "F" AUTOMATIC SPOOLER

Increased capacity in the new Type "F" Spooler permits spooling of cheeses and cones up to 6½ lbs. weight from bobbins up to 12¼" long. New features include redesigned bobbin pockets, skewers, winding drums, cheese arms, and snick plates — and the addition of a tailings sorter, tape breaker, and other optional mechanisms. As always, "Every Knot is a True Weaver's Knot."

LARGE-PACKAGE SUPER-SPEED WARPER

The companion machine to the Type "F" Spooler is an improved Super-Speed Warper and Creel. The creel is arranged to take the large 6½ lb. cheeses, the warper will wind larger beams than previous models. In addition, automatic power mechanisms built into the warper enable the doffer to handle the beam from warper to floor or truck with minimum effort.





VERSATILE WARP-DRAWING MACHINE

Improved models of the familiar Barber-Colman Warp Drawing Machine now handle an even greater variety of warps, drawing them accurately from flat sheet, one-and-one lease, or double beams. The pattern-controlled mechanism automatically selects the correct thread eyes for each end, in loom combinations of as many as 26 harness, 6 banks of drop wires, and a reed.

AUTOMATIC SPOOLERS • SUPER-SPEED WARPERS • WARP TYING MACHINES • WARP DRAWING MACHINES

BARBER-COLMAN COMPANY

ROCKFORD • ILLINOIS • U. S. A.

FRAMINGHAM, MASS., U. S. A. GREENVILLE, S. C., U.S.A. MANCHESTER, ENGLAND MUNICH, GERMANY

INDIA
Batliboi & Company
Forbes Street, Fort
Bombay, India

MEXICO
J. Rabasa
Isabel la Catolica 45-913
Apartado 7348
Mexico D.F., Mexico

BRAZIL
Industria e Comercio de Maquinas S. A.
"COMASA"
R. Glicerio, 537/547
Sao Paulo, Brazil

JAPAN
Do Yei Shoji Kabushiki Kaisha
Atlas Building (7th Floor)
11, Bingo-Machi, 3-Chome,
Higashi-Ku
Osaka, Japan

PAKISTAN
Associated Agencies (M'cr.) Ltd.
Piccadilly House
11 Piccadilly
Manchester 1, England

PAKISTAN
Associated Agencies (M'cr) Ltd.
730, Muhammadi House,
McLeod Road
Karachi 2, Pakistan

essed into 10/1, 20/1, 30/1, 40/1, 60/1, and 70/1 (59, 30, 20, 15, 12, 10, and 8 tex) yarns. For example, the 0.50-hank roving could be spun only into 10/1 and 20/1 yarns, whereas the 2.0-hank could be spun into 20/1, 30/1, 40/1, and 60/1 yarns.

The 10/1 yarn could be processed only from 0.50- and 1.0-hank rovings, giving two points of draft. The 40/1 yarn, however, could be processed from 1.0-, 1.5-, 2.0-, 3.0-, 4.0-, and 5.0-hank rovings, resulting in six points of draft.

As the experiment was set up it can be seen that its success or failure depended on the assumption that, other things being equal, the most uniform card sliver of a certain weight would produce the most uniform drawing sliver, the most uniform drawing sliver would produce the most uniform roving, etc. This meant that, within the range of drafts and doublings used, it was assumed that there was no apreciable difference in the degree of parallelization of the fibers of the like weight products being compared, since it has been shown (10) that this has a very important effect upon the drafting of a fibrous product. Therefore, initial experiments with the Deltapine cotton were designed primarily to check this assumption.

It was considered that if the assumption were true, a drafting organization using the optimum selections at each process, should yield yarn properties significantly superior to those using the worst selections, and the yarn properties resulting from any intermediate drafting organization should fall between the above selections.

After the experiments on the Deltapine cotton were completed and the assumption checked, Acala and Coker Wilt cottons having approximately the same staple length as the Deltapine but from different growth areas were selected and the experiments repeated using two replicates for each of these.

DESCRIPTION OF STATISTICAL METHOD

The experimental design consisted of five separate two-factor, factorial experiments, one each at the carding, first drawing, second drawing, roving, and spinning processes. Analysis of variance methods were used for measuring the significance of weight (or draft) effects.

For the effect of draft on the uniformity of card and drawing sliver as measured by the Saco-Lowell sliver tester, significance for individual treatments was judged by the size of the ratio between the variances for any two tests whose uniformity was compared. For both types of tests a difference was considered significant at the 95 per cent probability level.

RESULTS AND DISCUSSION

Since the processing machinery used in these experiments was limited to a certain range of product weights and drafts, the results and conclusions are based on data obtained within these limits. This, of course, does not rule out the possibility that with new or altered machinery some better draft allocation might be found outside this range.

The results showing the effect of the weight of picker lap on the uniformity of 45-, 55-, and 65-grain card slivers are listed in *Table 3*.

It should be recognized that the effect of unit weight automatically

TABLE 3. The Effect of Linear Weight of Picker Lap on the Uniformity of Card Sliver—Per Cent Coefficient of Variation

	Picker Lap—11 Oz/Yd[1] Card Sliver Wt, Gr			Picker Lap—13 Oz/Yd[2] Card Sliver Wt, Gr			Picker Lap—15 Oz/Yd[3] Card Sliver Wt, Gr			Picker Lap—17 Oz/Yd[4] Card Sliver Wt, Gr		
	45[5]	55[6]	65[7]	45[5]	55[6]	65[7]	45[5]	55[6]	65[7]	45[5]	55[6]	65[7]
Deltapine												
1st replicate	2.96	2.53	2.42	3.35	3.01	2.76	3.53	2.93	2.77	[8]	3.00	2.85
2nd replicate	3.27	2.91	2.55	3.34	2.91	3.07	—	—	—	[8]	2.92	2.82
Acala												
1st replicate	3.77	3.24	3.07	3.69	3.09	3.17	3.79	3.50	3.42	[8]	3.16	3.28
2nd replicate	3.96	3.42	3.51	3.91	3.35	3.05	3.60	3.15	3.59	[8]	3.53	3.81
Coker Wilt												
1st replicate	3.69	3.38	3.10	3.66	3.84	2.92	3.69	3.06	3.24	[8]	3.48	3.59
2nd replicate	3.90	3.42	3.51	3.84	3.85	3.21	3.50	3.52	3.40	[8]	3.53	3.10

[1]341 kilotex
[2]403 kilotex
[3]465 kilotex
[4]527 kilotex
[5]3.2 kilotex
[6]3.9 kilotex
[7]4.6 kilotex
[8]Outside the drafting limits of the card

What Speed Drawing Do *You* Need?

Ideal has pioneered every increase in drawing frame speed since the time 120 fpm was the accepted standard but, because not every mill needs or wants highest speeds, Ideal builds frames to produce highest quality drawing at several speeds.

750 fpm Ideal Super Speed Feathertouch Drafting Frames have been operating at speeds of 500 through 750 ft. per min. for months under ordinary mill conditions, and have been producing sliver of highest quality at these speeds. Ideal features, such as individual roll vacuum cleaning, instant knockoffs, and exclusive high speed coiler head design make this a completely safe and practical speed.

450 fpm Over a thousand deliveries of Ideal Feathertouch Drafting have been producing unexcelled sliver at 400 to 450 fpm. Some of these have been in operation for over two years. This speed is, and will probably continue to be, satisfactory for most mills.

250 fpm For those mills whose frames now produce from 100 to 120 fpm but which would like to improve quality and production, Ideal has an economy conversion which produces equally high quality sliver at a speed of 250 fpm.

Whether you need 750, 450 or 250 fpm, Ideal Feathertouch Drafting is your best investment. Let us give you full information.

Ideal Industries, Inc.
Bessemer City, N. C.

THE ORIGINATORS OF HIGH SPEED DRAWING

TABLE 4. The Effect of Weight of Card Sliver on the Uniformity of First Drawing — Per Cent Coefficient of Variation

	45-Gr[1] Card Sliver			55-Gr[2] Card Sliver			65-Gr[3] Card Sliver		
	First Dr Sliver Wt, Gr			First Dr Sliver Wt, Gr			First Dr Sliver Wt, Gr		
	45[1]	55[2]	65[3]	45[1]	55[2]	65[3]	45[1]	55[2]	65[3]
Deltapine									
1st replicate	4.18	3.67	3.69	4.22	3.75	3.40	4.75	3.92	3.81
2nd replicate	4.56	3.81	3.61	4.82	3.95	3.54	4.88	4.74	4.16
Acala									
1st replicate	4.57	4.17	3.52	4.40	3.78	3.35	5.62	3.98	3.62
2nd replicate	4.49	5.15	3.84	4.20	3.84	3.12	4.44	4.86	3.74
Coker Wilt									
1st replicate	4.55	3.98	3.52	4.71	3.97	3.23	4.53	4.02	3.91
2nd replicate	4.19	5.00	4.16	4.35	4.05	3.80	4.52	5.00	3.89

[1]3.2 kilotex
[2]3.9 kilotex
[3]4.6 kilotex

implies the effect of draft. For the sake of simplicity, only weight will be mentioned through roving. Differences in sliver uniformity for the 11- and 13-ounce laps of Deltapine cotton were not statistically significant. However, using the variance ratio test, the data for 11-, 13-, 15-, and 17-ounce laps indicated that the heavier the lap the more nonuniform was the card sliver. Therefore, the 11-ounce picker lap was selected for the Deltapine cotton.

The analysis of variance tests for the Acala and Coker Wilt cottons between weight laps revealed no difference between them in regard to sliver uniformity. The variance ratio tests showed some of the individual samples to be significantly different, but these instances were erratic and no definite trend was discernible. For practical purposes the 13-ounce picker lap was selected for both cottons.

The results showing the effect of the weight of card sliver on the uniformity of 45-, 55-, and 65-grain first drawing sliver are listed in *Table 4*.

The analysis of variance tests for the Deltapine cotton showed a significant difference between weight and sliver uniformity. As seen from the table, the 45-grain card sliver produced the most uniform 45- and 55-grain first drawing, while the 55-grain card sliver produced the most uniform 65-grain first drawing.

The analysis of variance tests for the Acala and Coker Wilt cottons did not reveal a significant difference between weights of card sliver in regard to first drawing sliver uniformity. The variance ratio test for the Acala cotton revealed the following for individual samples: The 55-grain first drawing sliver of replicate No. 1 from the 55-grain card sliver was significantly more uniform than that from the 45 and 65 grains/yard card sliver.

The 55- and 65-grain first drawing slivers of replicate No. 2 from the 55-grain card sliver was significantly more uniform than that from the 45- and 65-grain card sliver. On the basis of these tests the 55-grain card sliver was selected as producing the most uniform first drawing sliver for the Acala cotton.

The variance ratio tests for the Coker Wilt cotton that showed significant differences revealed the

TABLE 5. The Effect of Weight of First Drawing Sliver on the Uniformity of Second Drawing—Per Cent Coefficient of Variation

	45-Gr[1] First Dr Sliver			55-Gr[2] First Dr Sliver			65-Gr[3] First Dr Sliver		
	Second Dr Sliver Wt, Gr			Second Dr Sliver Wt, Gr			Second Dr Sliver Wt, Gr		
	45[1]	55[2]	65[3]	45[1]	55[2]	65[3]	45[1]	55[2]	65[3]
Deltapine									
1st replicate	4.18	3.95	3.74	4.29	3.77	3.80	4.15	3.80	3.74
Acala									
1st replicate	4.69	4.04	3.96	4.57	4.25	4.27	4.19	4.06	4.02
2nd replicate	4.48	4.18	3.98	4.34	4.23	4.19	4.52	4.22	3.98
Coker Wilt									
1st replicate	4.34	4.19	3.73	5.00	3.91	3.99	4.18	3.90	3.83
2nd replicate	4.51	3.88	3.87	4.67	4.08	4.15	4.18	4.20	4.31

[1]3.2 kilotex
[2]3.9 kilotex
[3]4.6 kilotex

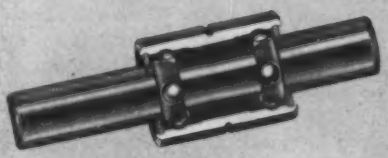
MRC

EXTERNALLY DRY—PERMANENTLY LUBRICATED

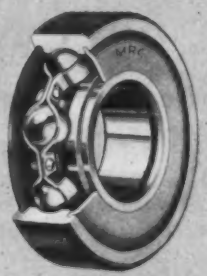
BALL BEARINGS

used in the Textile Industry

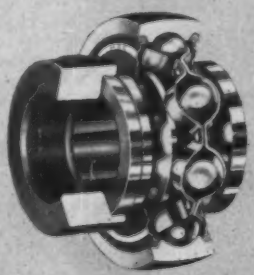
"SYNTHE-SEAL" Ball Bearing



INTEGRAL SHAFT Ball Bearing



DEEP-GROOVE—DOUBLE-SHIELD Ball Bearing



POWER TRANSMISSION Ball Bearing

MRC "SYNTHE-SEAL" Ball Bearings have been used for over 10 years by leading manufacturers of electric motors for textile machinery. These bearings seal out lint and moisture and retain lubricant, reduce maintenance costs and prevent material spoilage.

MRC INTEGRAL SHAFT Ball Bearings eliminate inner races and shaft fits. "Synthe-Seals" protect against dirt and moisture during installation and use. Manufacturing and maintenance costs are reduced in idler pulleys, thread guides, tension pulleys, drawing frame rolls, spinning frame top rolls, treadle rolls and spindles.

MRC DEEP-GROOVE—DOUBLE-SHIELD Ball Bearings are universally used in machine applications involving low torque, high speed requirements. The shields protect the bearings from foreign matter and permit factory prelubrication.

MRC POWER TRANSMISSION Ball Bearings are used throughout the textile industry to accommodate standard cold-rolled shafts in all types of equipment, as well as supporting line shafting. These bearings are provided with M-R-C "Synthe-Seals" to keep out foreign matter and permit lifetime lubrication.

SEE M-R-C- DISPLAYS BOOTHS 606-607
AMERICAN TEXTILE MACHINERY EXHIBITION
Atlantic City Auditorium May 23-27

MRC BALL AND ROLLER *bearings*

MARLIN-ROCKWELL CORPORATION
Executive Offices: **Jamestown, N.Y.**

RÜTI

High speed looms, sizing machines and warpers for versatility, quality and top performance.

Now available in the USA through H. J. Theiler Corporation., Ashmont Ave., Whitinsville, Mass.

Ruti, specializing exclusively since 1842 in weaving mill equipment, will show four of its extensive line of high speed looms at the ATMA Exhibition at Atlantic City.

4×1 automatic loom with bobbin container for fancy fabrics. 1×1 high speed loom with Unifil. 1×1 automatic loom with box container for weaving quality fabrics from a wide range of yarn counts. 4×1 automatic bobbin changing loom for silk and synthetic fibers.

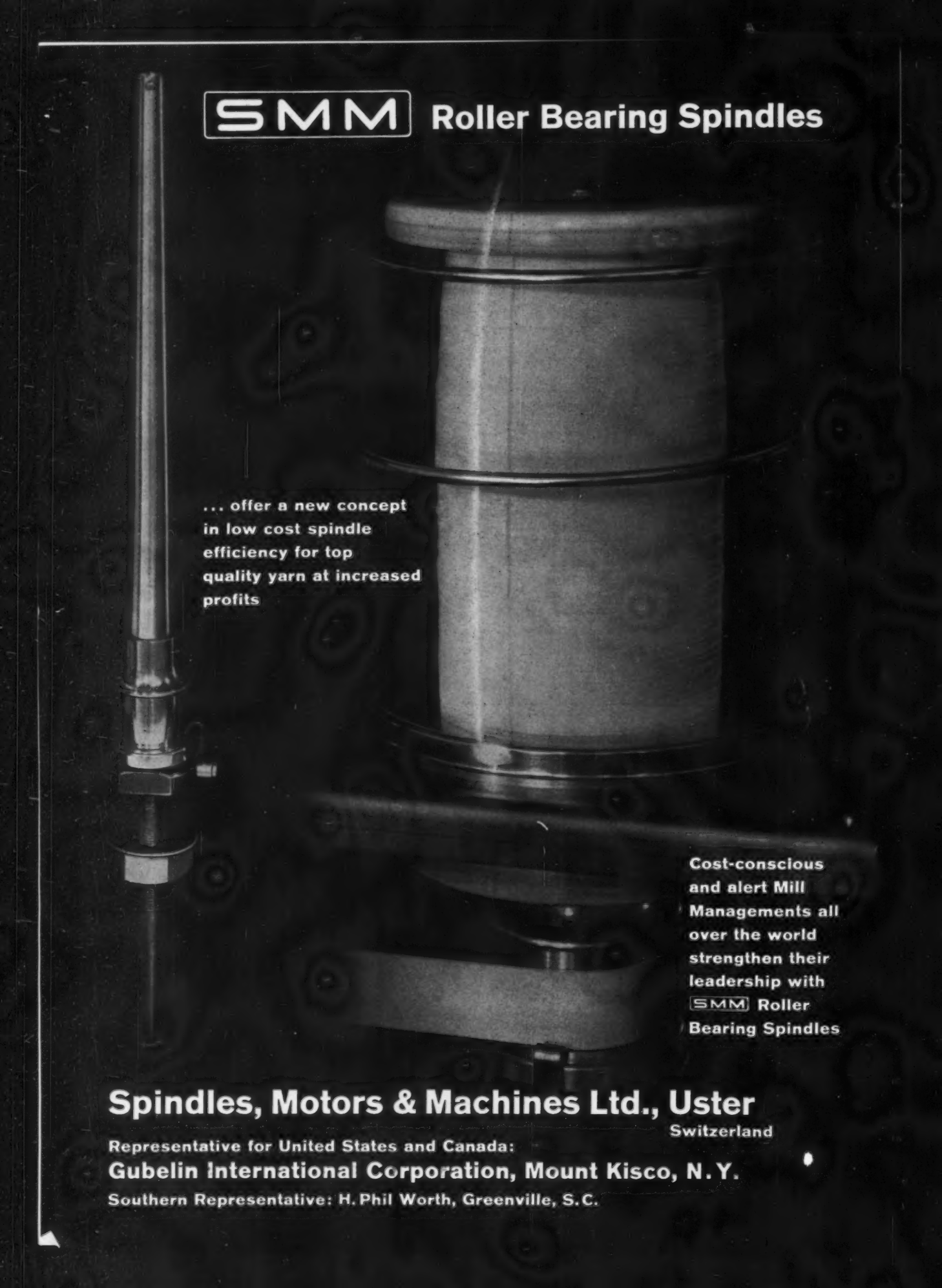

SMM Roller Bearing Spindles
... offer a new concept in low cost spindle efficiency for top quality yarn at increased profits
Cost-conscious and alert Mill Managements all over the world strengthen their leadership with SMM Roller Bearing Spindles
Spindles, Motors & Machines Ltd., Uster
Switzerland
Representative for United States and Canada:
Gubelin International Corporation, Mount Kisco, N.Y.
Southern Representative: H. Phil Worth, Greenville, S.C.

TABLE 6. The Effect of Weight of Second Drawing Sliver on the Uniformity of Roving

Roving		Deltapine Second Dr Sliver Wt, Gr			Acala Second Dr Sliver Wt, Gr			Coker Wilt Second Dr Sliver Wt, Gr		
Hank	Tex	45[1]	55[2]	65[3]	45[1]	55[2]	65[3]	45[1]	55[2]	65[3]
		Mean Deviation, %			Coefficient of Variation, %			Coefficient of Variation, %		
1st replicate										
0.50	1181	—	—	—	5.9	6.3	6.3	6.3	6.5	6.9
1.0	590	4.9	5.16	4.92	6.4	6.3	6.7	7.0	6.9	7.2
1.5	394	—	—	—	6.4	7.0	6.8	7.4	7.9	7.6
2.0	295	5.24	5.38	5.58	7.0	6.9	6.8	7.1	6.9	7.4
3.0	197	5.54	5.99	6.03	7.2	7.2	7.4	7.5	7.4	7.5
4.0	148	6.63	6.42	7.06	7.8	7.9	8.2	8.0	8.0	8.7
5.0	118	7.01	7.85	7.61	7.7	8.0	8.0	8.3	8.7	8.6
6.0	98	7.92	8.59	8.81	7.9	8.5	8.9	8.6	8.8	8.8
2nd replicate										
0.50	1181	—	—	—	5.9	5.9	6.0	6.1	6.2	7.2
1.0	590	—	—	—	6.5	6.5	6.5	6.8	6.7	6.7
1.5	394	—	—	—	6.7	6.9	7.3	7.1	7.1	7.9
2.0	295	—	—	—	6.8	7.2	7.3	7.3	7.3	7.4
3.0	197	—	—	—	7.3	7.3	7.5	7.3	7.8	7.7
4.0	148	—	—	—	8.2	8.4	8.6	8.3	8.2	8.1
5.0	118	—	—	—	8.1	7.8	8.2	8.8	8.7	8.9
6.0	98	—	—	—	8.6	8.7	8.8	8.7	9.1	9.5

[1]3.2 kilotex
[2]3.9 kilotex
[3]4.6 kilotex

following: The 65-grain first drawing sliver of replicate No. 1 from the 55-grain card sliver was significantly more uniform than that from either the 45- or 65-grain card sliver. The 55-grain first drawing sliver of replicate No. 2 from the 55-grain card sliver was significantly more uniform than that from either the 45- or 65-grain card sliver.

The 65-grain first drawing sliver from the 55-grain card sliver was significantly more uniform than that from the 45-grain card sliver. As was true with the Acala, the 55-grain card sliver was selected as the one that would produce the most uniform first drawing sliver for the Coker Wilt cotton.

The results showing the effect of the weight of first drawing sliver on the uniformity of 45-, 55-, and 65-grain second drawing sliver are listed in *Table 5*.

The analysis of variance tests for the Deltapine, Acala, and Coker Wilt cottons showed no significant differences between weight of first drawing sliver on the uniformity of second drawing sliver.

The variance ratio test showed that the 45-grain second drawing sliver of Acala cotton replicate No. 1 from the 65-grain first drawing was more uniform than that from the 45- and 55-grain first drawing sliver.

The 45-grain second drawing sliver of Coker Wilt cotton replicate No. 1 and No. 2 from the 65-grain first drawing sliver was more uniform than that from the 45- and 55-grain first drawing. The 55- and 65-grain second drawing of the Coker Wilt replicate No. 2 from the 45-grain first drawing was more uniform than those from the 65-grain first drawing sliver.

On the basis of these observations the 65-grain first drawing was selected as producing the most uniform 45-grain second drawing while the 45-grain first drawing was selected as producing the most uniform 55- and 65-grain second drawing for all three cottons.

The results of the effect of weight of second drawing sliver on the uniformity of roving are seen in *Table 6*.

The analysis of variance tests showed a significant trend toward the light-weight second drawing sliver producing the most uniform 0.50- through 6.00-hank rovings for all three cottons. This was the most pronounced and consistent trend observed for any of the processes prior to spinning.

Figure 2 [p 225] shows effect of spinning draft on the skein count-strength product of yarns from the Deltapine, Acala, and Coker Wilt cottons. Only one replicate was run on the Deltapine, while two were made for the Acala and Coker Wilt cottons.

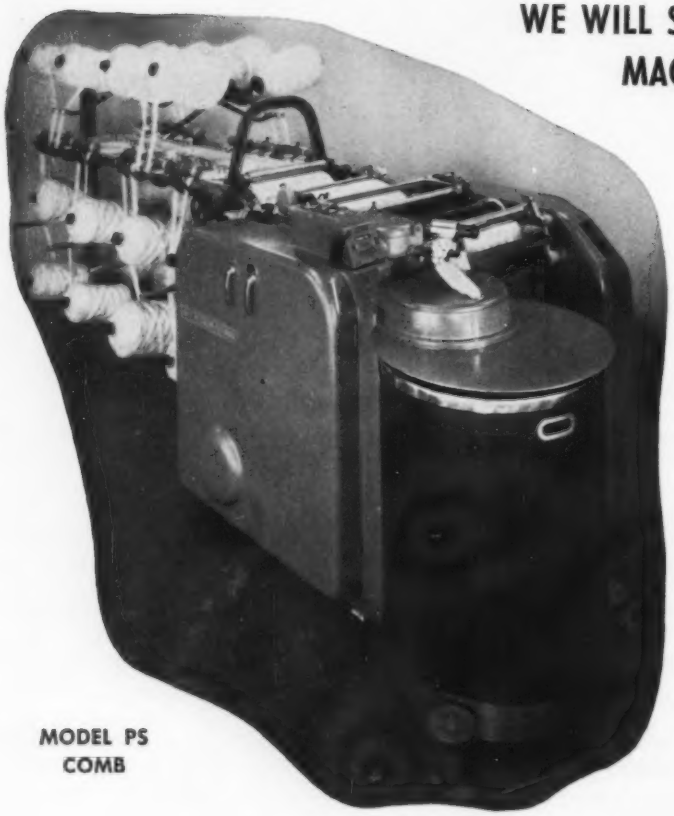
It can be seen that for the coarse yarns (10/1 and 20/1) there is a decrease in strength with an increase in draft for all cottons. The 40/1 yarn from the Deltapine cotton appears to be little affected by draft, while the 60/1 and 70/1 yarns of this cotton increased in strength with an increase in draft. The 30/1, 40/1, 60/1, and 70/1 yarns of the Acala and Coker Wilt cottons increase in strength, reach a maximum, and then decrease as the draft is increased. Because of excessive ends down the 70/1 yarn from the Coker Wilt could not be spun at the high draft.

There are several interesting points brought out by this graph. One is that the curves from the replicate test are almost identical with those from the first test, giving assurance to the validity of the tests. Another is that optimum spinning drafts of the yarns from the Acala and Coker Wilt cottons are practically the same even though these cottons are from

SANT'ANDREA NOVARA

NOVARA, ITALY

Europe's Largest Manufacturer of Worsted Machinery



MODEL PS
COMB

WE WILL SHOW THE FOLLOWING MACHINES AT ATLANTIC CITY BOOTHS NO. 1312-15, 1223-26

1. Our NEW Rectilinear comb, Model PS, combing wool at 160 nips per minute.
2. The PS comb processing synthetic staple at 175/minute.
3. Our NEW High Speed Gill Box with Automatic Evenness Regulator.
4. Our NEW High Draft Finisher Rover with Rub-Apron Delivery.

VISIT US AT THE SHOW, WRITE US, CALL US FOR COMPLETE DETAILS ON THESE AND ANY OTHER MACHINES FOR PROCESSING WOOL AND LONG STAPLE SYNTHETICS.

American Textile Machinery Exhibition - International

ATMA

Parade of Progress

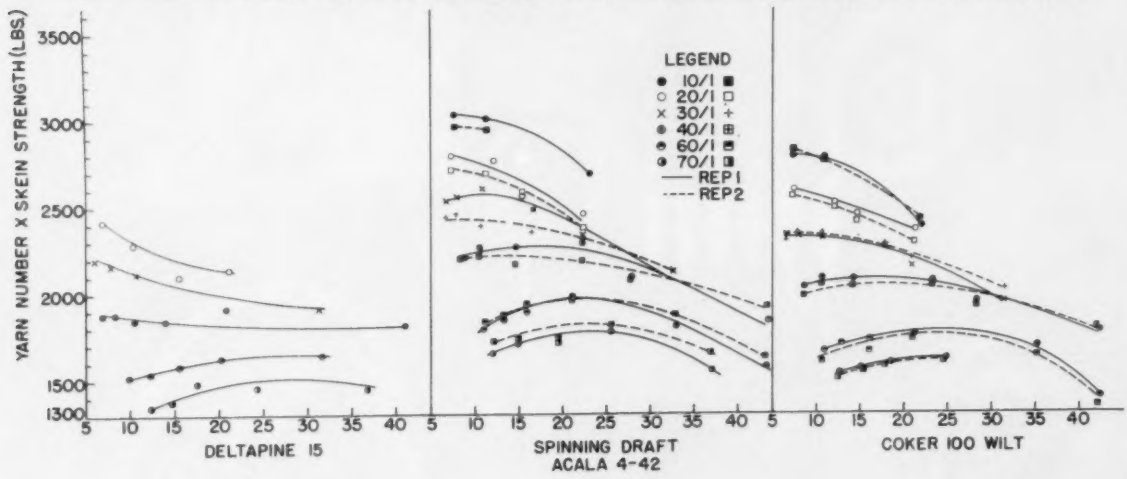
Atlantic City Auditorium
May 23 thru 27, 1960
Atlantic City, N.J., U.S.A.

Representatives for U.S.A. and Canada

ERNEST L. FRANKL ASSOCIATES

515 MADISON AVE., NEW YORK 22, N. Y.

Figure 2. Effect of spinning draft on the count-strength product of yarns from Deltapine, Acala, and Coker Wilt cottons.



widely different growth areas. The optimum spinning drafts are approximately 7, 7, 10, 20, 22, and 25 respectively, for 10/1, 20/1, 30/1, 40/1, 60/1, and 70/1 yarns from all three cottons.

An important fact observed is that there is a critical or optimum spinning draft for the 60/1 and 70/1 yarns of the Acala and Coker Wilt cottons, and drafts on the high or low side of this draft can result in a significant loss in yarn strength. An incorrect draft on the low side will not only result in a loss in yarn strength, but will also result in a loss of production at the roving frame. A plotting of spinning draft against single strand count-strength product yielded results similar to those above.

It has been brought out in another study (11) that when spinning draft is the variable, an increase in skein strength is also accompanied by an increase in uniformity and elongation. This was also found true in this study, and for that reason, only the effect of spinning draft on the skein count-strength product has been shown.

OPTIMUM, MEDIUM, AND WORST DRAFT ORGANIZATIONS FOR DELTAPINE COTTON

In order to test the original assumption (i.e., that other things being equal, the most uniform product at one process will draft into the most uniform product at the next process) the following experiment was performed on the Deltapine cotton prior to the processing of the other two cottons:

Draft Organization 1. For this organization the optimum spinning draft, hank roving, weight drawing, and card slivers were selected for each process from *Figure 2* and *Tables 3* through *6*.

Draft Organization 2. For this organization the worst spinning draft, hank roving, weight drawing, and card slivers were selected from *Figure 2* and *Tables 3* through *6*.

Draft Organization 3. For this organization the optimum spinning draft, worst first and second drawing, and card slivers were selected from *Figure 2* and *Tables 3* through *6*. 20/1, 30/1, and 60/1 yarns were spun using each of these organizations.

If the assumption has been correct, Draft Organization 1 should produce the best yarn properties, Organization 2 the worst, and Organization 3 somewhere between these two.

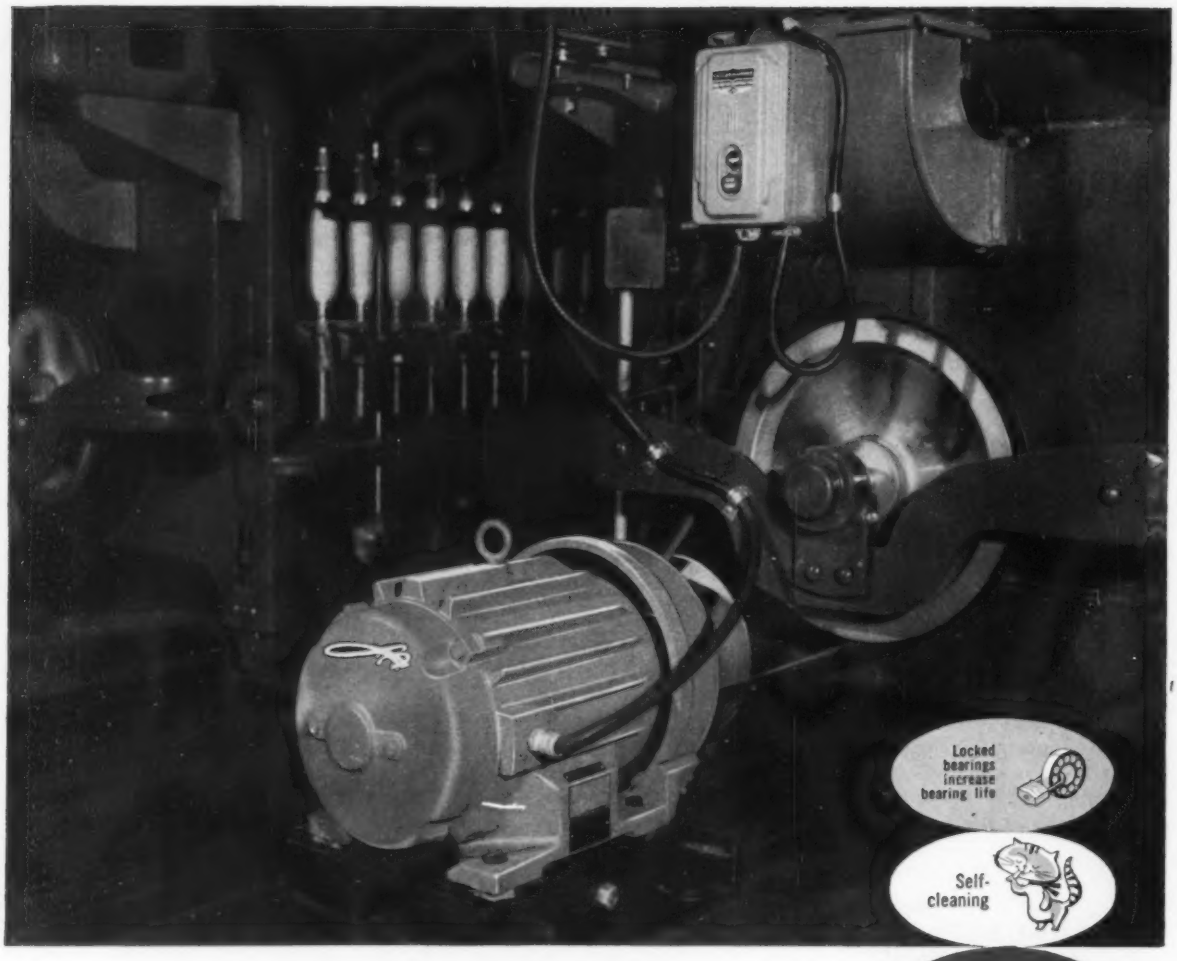
The single strand and skein count-strength product, per cent coefficient of variation from the Uster, and the per cent elongation for the yarns processed with each draft organization are listed in *Table 7*.

Analysis for the significance of the differences of means of single strand and skein count-strength products, and per cent coefficient of variation as obtained from the Uster, between draft Organizations 1 and 2, and 1 and 3 were made for each yarn count.

The analysis of the skein count-strength products showed that Organization 1 is significantly better than Organization 2 or 3 for all yarn counts.

From the large differences of the means between 1 and 2 and the smaller differences between 1 and 3, it is indicated that spinning draft has more effect than the other processing drafts combined on final yarn skein strength. Nevertheless, as shown by the significant differences between 1 and 3, these processing drafts prior to spinning must be recognized as significantly affecting the yarn skein strength.

There was a significant difference between the single strand count-strength products of processing organizations 1 and 2, for the 20/1 and 30/1 yarn. The differences between the means of Organizations 1 and 3 were much less than those between 1 and 2 for these yarn numbers. For the 30/1



No lint on this motor!

Self-Cleaning Louis Allis "Clean-Flo" textile motor provides double protection in lint-laden atmospheres

Reduce harmful lint pile-ups by powering your equipment with the Louis Allis "Clean-Flo" textile motor shown above.

Note that the fan can be mounted on the shaft end of the motor. This important feature means that lint and dust are *blown away from the driven machine—not into it!* That keeps spools and bobbins from drying out, too.

The self-cleaning design of the "Clean-Flo" prevents lint pile-up on the motor itself. External surfaces are smooth and streamlined. There are no pockets or obstructions to catch lint. Even the fan is self-cleaning — and its powerful air flow not only blows lint and dust off the housing, but it increases motor cooling efficiency.

The Louis Allis "Clean-Flo" is the shortest enclosed textile motor on the market. It meets standard NEMA mounting dimensions — and can be interchanged with all NEMA standard motors. The motor is also available with conventional shaft extension in sizes and speeds your job requires.

For more information, get a copy of Bulletin 1850. Ask for it at your Louis Allis District Office — or write direct to The Louis Allis Co., 468 E. Stewart Street, Milwaukee 1, Wisconsin.

TE-111

LOUIS ALLIS

MANUFACTURER OF ELECTRIC MOTORS AND ADJUSTABLE SPEED DRIVES

TABLE 7. Effect of Draft Organization on Yarn Strength, Uniformity, and Elongation

Draft	Count-Strength Product						Coefficient of Variation, %			Elongation, %		
	Skein[4]			Single Strand[5]								
Org	20s[1]	30s[2]	60s[3]	20s[1]	30s[2]	60s[3]	20s[1]	30s[2]	60s[3]	20s[1]	30s[2]	60s[3]
1	2472	2205	1729	8942	7539	6565	15.9	19.4	27.0	7.62	6.98	5.50
2	2283	1874	1552	8100	6708	6476	20.8	23.1	25.9	6.62	6.40	5.32
3	2384	2135	1562	8608	7406	6076	18.4	20.7	26.5	7.40	6.75	5.08

[1]30 tex
[2]20 tex
[3]10 tex
[4]Based on skein strength in pounds
[5]Based on single-strand strength in grams

yarn it was not significant. This also indicates that spinning draft more significantly affects the single strand strength than drafts at any of the other processes, especially for coarse yarns.

The results of the single strand strength from the analysis of the 60/1 yarns showed that Organization 1 had the highest mean value. However, Organizations 2 and 3 were not in the order that would be expected. The uniformity and per cent elongation results of the 20/1 and 30/1 yarns were in the same order as the single strand and skein strengths.

The 60/1 yarns, as before, did not show this consistency. This is no doubt due to the fact, as explained in another work (10), that the finer the yarn number the more difficult it becomes to evaluate the processing organization. A statistical analysis of the uniformity results showed that for the 20/1 and 30/1 yarns, Organization 1 was significantly more uniform than 2 and 3. The difference between 1 and 2 was larger than that between 1 and 3. For the 60/1 yarns there were no significant differences.

An over-all summary of the above results indicate the following:

1. That draft Organization 1 is optimum.
2. Draft Organization 3 is next in order, and
3. Draft Organization 2 is the worst of the three.

The fact that the three organizations fell in this order lends very strong support to the original assumption, i.e., "The most uniform product fed will draft into the most uniform product."

CONCLUSIONS

This study on medium staple cottons shows that there are definite draft allocations, from picking through spinning, required to obtain optimum yarn uniformity, strength, and elongation. The most significant trend observed for the processes prior to spinning was that a light-weight second drawing sliver produced the most uniform 0.50- through 6.00-hank rovings.

It was noted that even though the Acala and Coker Wilt cottons were from different growth areas, their optimum draft allocations were practically the same. In fact, their optimum spinning drafts were identical.

It was found that spinning draft had more effect on yarn uniformity and strength than the other processes, although these processes had a significant effect upon these properties.

It is recognized that some of the drafts that yielded the most uniform and strongest yarns in this investigation will not be acceptable to some mills because of the sacrifice in production. A careful analysis of the findings, however, should prove beneficial in more profitably balancing the requirements of cost and quality. In some cases, such as for the 40/1, 60/1, and 70/1 yarns it was shown that the yarn quality could be improved by increasing the draft up to a certain point.

The experiment, necessarily, was limited to certain drafting systems. Therefore, the precise draft findings are limited to these particular systems. Most of the findings, however, are believed to be of a general nature and applicable to all types of drafting systems generally being employed for producing cotton yarns.

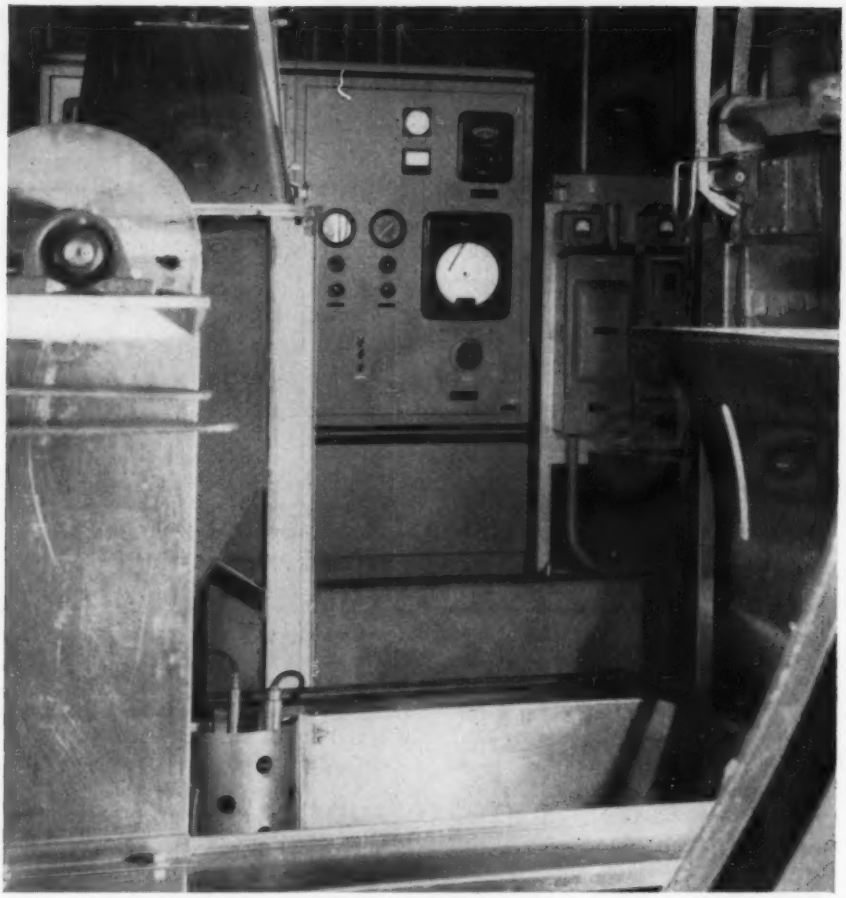
Acknowledgments

The authors wish to express their appreciation to Wilbur F. McSherry and Shirley M. Reinhardt for making the yarn strength and uniformity tests, to Dorothy C. Legendre and Marilyn M. Smith for the fiber properties tests, and to fellow members of the Cotton Mechanical Laboratory for processing the slivers, rovings, and yarns used in this investigation. Credit also is due H. W. Little for his advice and aid in evaluating the experimental data.

References

1. American Society for Testing Materials, ASTM Designations D 1441-54, D 1443-56, D 1447-54T, and D 1448-58. Philadelphia: ASTM, 1958.
2. American Society for Testing Materials, ASTM Designation D 180-57T. Philadelphia: ASTM, 1958.
3. Cavaney, B., and Foster, G. A. R., *J. Textile Inst.* **46**, T529-550 (1955).
4. Copeland, H. R., *Textile Bull.* **85**, 52-55 (Feb. 1959).
5. Dougherty, J. E., Hance, L. H., and Martin, W. H., TEXTILE INDUSTRIES **116**, 111-126 (Oct. 1952).
6. Fiori, L. A., TEXTILE INDUSTRIES **112**, 92-97 (June 1948).
7. Grishin, P. F., *J. Textile Inst.* **45**, T167-266 (1954).
8. Rusca, R. A., *Textile Research J.* **20**, 780-786 (1950).
9. Simpson, J., Landstreet, C. B., and Corley, J. R., *Textile Research J.* **22**, 42-48 (1952).
10. Simpson, J., *Textile Quality Control Papers* **1**, 77-87 (1954).
11. Simpson, J., and Sens, C. L., TEXTILE INDUSTRIES **123**, 108-114 (June 1959).
12. Corley, J. R., and Simpson, J., TEXTILE INDUSTRIES **120**, 114-119 (Dec. 1956).
13. Simpson, J., and Sens, C. L., TEXTILE INDUSTRIES **123**, 100-103 (Sept. 1959).

Over 50 modern mills now save with—



Compact, cabinet-mounted installation of Foxboro Concentration Control for weak acid saturator in a large northern mill. Cabinet also contains Foxboro Temperature Controller and Pneumatic Loading Controls.

COMPLETELY AUTOMATIC CONTROL

For these and other important operations

Caustic	Continuous Bleaching Continuous Desizing Dilution for other Processes
Sulfuric Acid	Souring after Desizing Souring after Mercerizing Wool Carbonizing Dilution for other Processes
Sodium Hypochlorite	Dilution for Bleaching
Muriatic Acid	Souring after Causticizing
Acetic Acid	Souring after Causticizing

Savings in time, labor, and chemicals amounting to as much as $120 a week have been realized by leading mills through the use of Foxboro Concentration Control! This accurate, completely automatic system eliminates time-consuming manual checks. Once the Controller index pointer is set at the desired value, proper bath concentration is automatically maintained throughout the working period. What's more, *constant* Foxboro Control assures a *smooth* flow of chemical to the bath . . . prevents strong surges . . . frees personnel from hazard of handling strong chemicals.

Besides positive control action, the Controller provides a continuous chart record in percent concentration, °Be, or °Tw . . . proof of proper bath conditions and a foolproof means of duplicating them. Protect uniformity in your mill and save—with Foxboro Automatic Concentration Control. Write for full details. **The Foxboro Company, 485 Neponset Avenue, Foxboro, Massachusetts.**

FOXBORO INSTRUMENTATION

REG. U. S. PAT OFF.

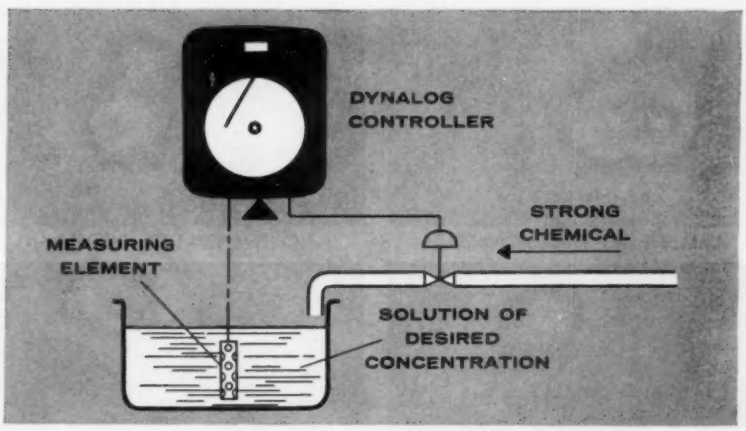
Foxboro Chemical Concentration Control in typical "at-the-machine" mounting serves caustic saturator for continuous bleaching range in one of largest southern bleacheries. Foxboro control valve in overhead line regulates flow of strong caustic.

OF CHEMICAL CONCENTRATION

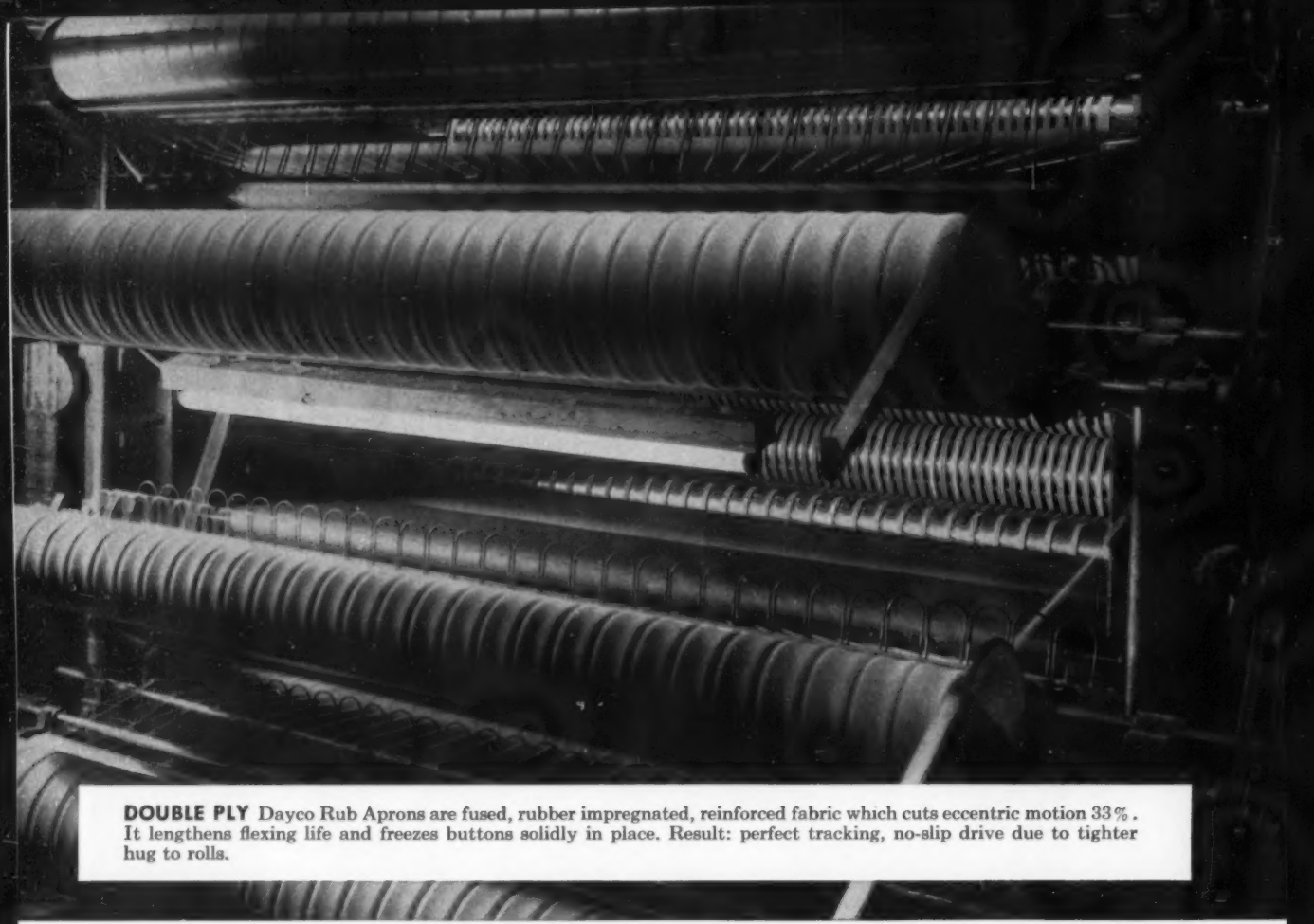
Simple, Dependable Control System

The rugged, highly accurate Foxboro Dynalog* Controller is used for this system. Its measuring element is a conductivity cell installed in the bath. Whenever bath concentration falls below proper value, control action instantly operates a valve in the feed line . . . automatically supplies the exact amount of strong chemical required. Controller is quickly adjustable for any concentration within its range.

*Reg. U. S. Pat. Off.



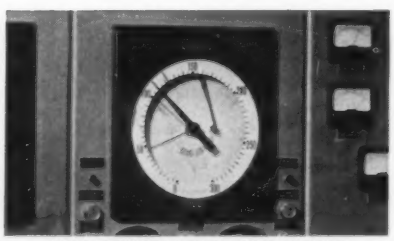
FOR TEXTILE PROCESS CONTROL



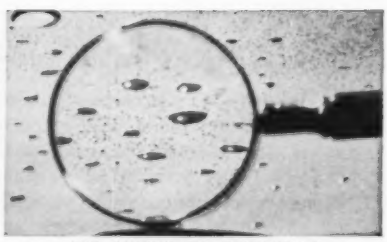
DOUBLE PLY Dayco Rub Aprons are fused, rubber impregnated, reinforced fabric which cuts eccentric motion 33%. It lengthens flexing life and freezes buttons solidly in place. Result: perfect tracking, no-slip drive due to tighter hug to rolls.

DELIVERS 33% MORE YARN UNIFORMITY.....

IMMUNE TO EMULSION OILS



NO TEMPERATURE PROBLEMS



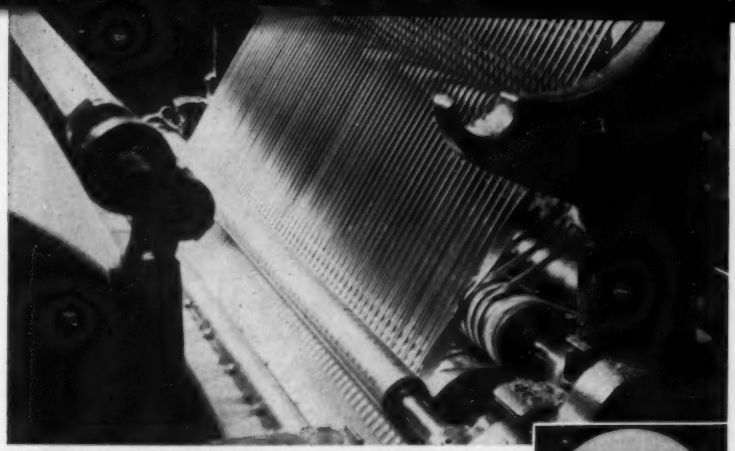
NO HUMIDITY PROBLEMS

REINFORCED FOR BETTER TRACKING

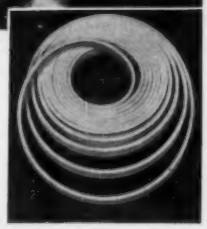
NO WOOL PIGMENT ABSORPTION

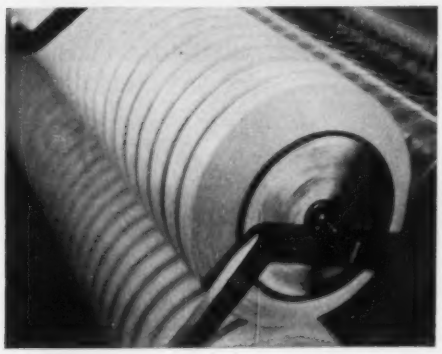
NO GLAZING, NO SLICKING

NO SWELL with Dayco Rub Aprons. Their special formulated texture keeps them free of emulsion oils that cause growths and rubbing surface breakdowns on ordinary aprons. Temperature and humidity changes have no effect on the Dayco Rub Apron. Color pigments from dyed wool are not absorbed . . . slicking and glazing are reduced to a negligible minimum.



MINIMUM MAINTENANCE, top card efficiency, better web uniformity are yours with Dayco Endless Condenser Tapes. Precision compounding prevents stretch and cracking, reduces take-ups and groove-jumping. Oil deterioration, static are eliminated. The permanent square edge permits close-tolerance nesting for cleaner cuts and minimum stealing. They're longer lasting—yet original cost is lower.





HIGHEST COEFFICIENT OF FRICTION of any apron on the market. That is the important difference in this remarkable Dayco Rub Apron. It means proper yarn condensing and more high quality yarn per machine. Because the surface keeps renewing itself, you also get longer life with heavy-duty Dayco Rub Aprons.

. . PLUS MORE YARN PER CARD

with DAYCO RUB APRONS

Here with Dayco Rub Aprons is a range of special built-in textures answering all the individual rub needs of any mill. Each has the highest coefficient of friction of any apron available today. Each is so designed and formulated that it maintains its condensing efficiency unchanged through its lifetime of use.

The unique advanced 2-ply construction minimizes need for adjustments, delivers longer trouble-free service, requires less maintenance, no downtime.

Look for more yarn per card and 33% greater yarn uniformity with cards equipped with Dayco Rub Aprons—thanks to Dayton's exclusive surface texture that stays good from the first day of use without change.

Ask your Dayco Representative to set up a test. Phone or write the Dayton Rubber Co., Textile Division, 401 South Carolina National Bank Bldg., Greenville, South Carolina.

Dayton Rubber

Dayco and Thorobred Textile Products for Better Spinning and Weaving.

OVERSEAS PLANT: THE DAYTON RUBBER CO., LTD., DUNDEE, SCOTLAND.

Reasons behind the fast-growing trend to DAYCO SYNTHETIC CONDENSER TAPES

THE SUCCESS of Dayco synthetics in cots and aprons, loop pickers and lug straps is also effecting a big change in the use of conventional condenser tapes. "Leather men are weather men" they say because the expert can look at a piece of leather and tell you whether the animal from which it came had a dry year. This legend is the clue to the growing acceptance of Dayco synthetic condenser tapes, bringing as they do, an end to the constant humidity and weather problem.

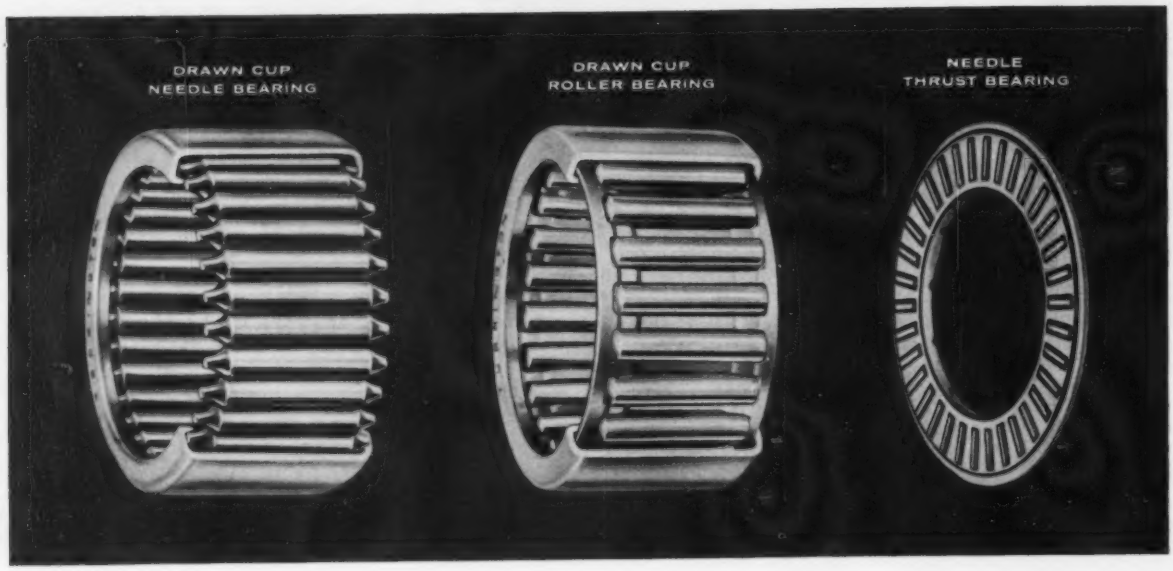
But the Dayco synthetic condenser tapes are earning a great deal more attention for other good and practical reasons. One is the fact that Dayton, for instance, can now make them to closer tolerances. This means a remarkable precision fit in the steel roller grooves.

The Dayton Endless Condenser Tape besides possessing very close-tolerance, non-permanent stretch has a permanent square edge to eliminate groove-jumping, twisting and turn-over.

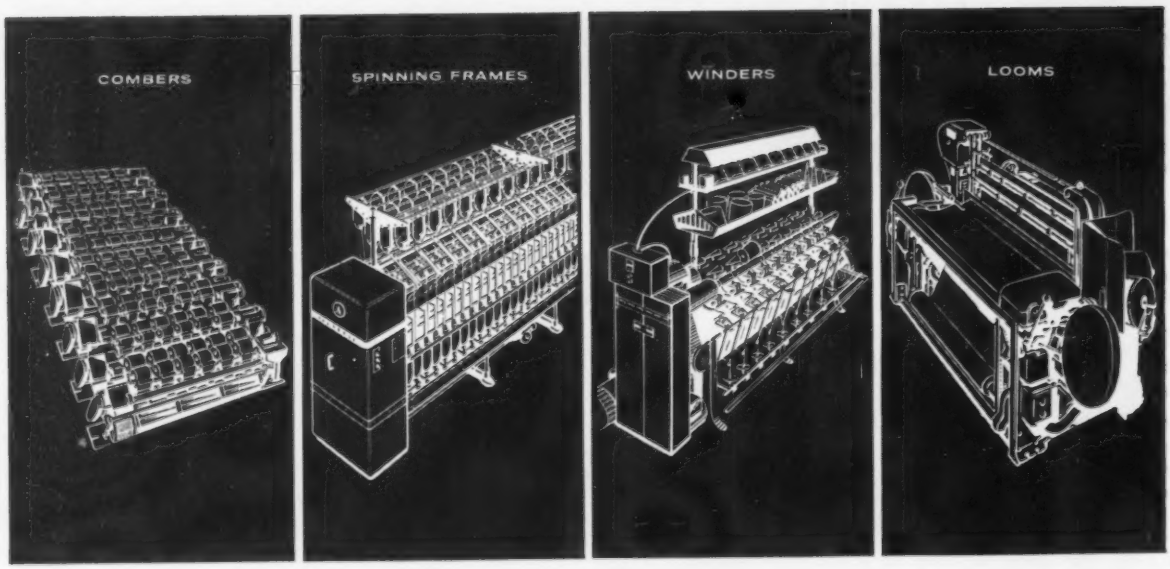
These Dayco condenser tapes have ended oiling maintenance problems and costs and the nuisance of oil deterioration.

The reason Dayton Endless Condenser Tapes last longer, yet cost less, is a small consideration compared to the really big reason for the switch to Dayco tapes. Top card efficiency, better web uniformity, cleaner cutting, minimum stealing are the real reasons.

TORRINGTON NEEDLE BEARINGS



IN TEXTILE MACHINERY



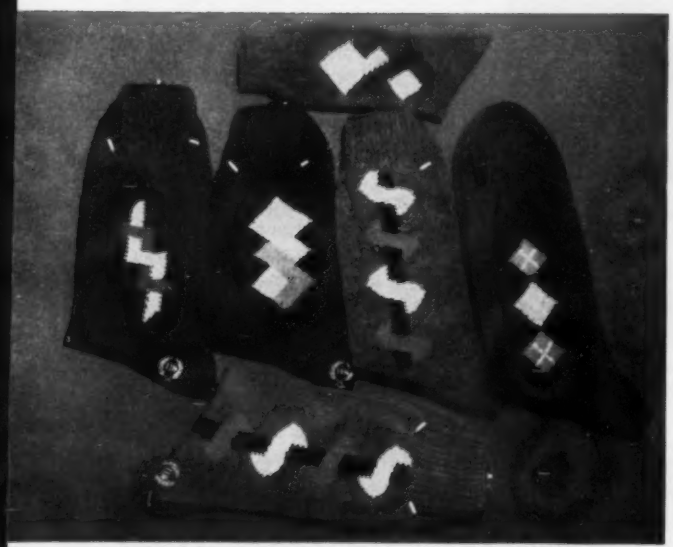
IMPROVE PERFORMANCE
CUT MAINTENANCE COSTS
ADD YEARS TO SERVICE LIFE

Visit Torrington • Booth 48 • American Textile Machinery Exhibition

progress through precision **TORRINGTON BEARINGS**

THE TORRINGTON COMPANY Torrington, Conn. • South Bend 21, Indiana

KNITTING SECTION



Some of the many patterns that can be made by the WK-A method.

WK-A lifts ceiling on style

New knitting method increases half-hose pattern and color possibilities; pattern edges are sharper, inside floats fewer

by Winston Shewmake
Exclusive

A NEW method of knitting, known as the "WK-A Alternate Progression Method," has had considerable success at Wright Knit Hosiery Mills, Inc., of Hickory and Burlington, N. C., and much interest has been expressed concerning it throughout the solid-color knitting industry. This method was conceived and developed by chief design engineer, Clifford Auton, who heads the experimental department at Wright Knit.

Application for a patent is on file in the U. S. Patent Office for the new method. The product of several years of research and design, the method of knitting offers many novel features which have long been sought by hosiery buyers and manufacturers.

Features of WK-A. The new features which are of paramount interest to hosiery buyers are:

(1) The endless variety of intricate solid-color patterns now possible by use of the alternate progression system.

(2) The clear pattern segment edges (an optional feature) of the new method. Sharply defined edges of the pattern make a neater appearance with more contrast.

(3) The additional variety of color in the pattern segments, in that a number of colors may be obtained horizontally within a single complete course of knitting (more than 16 per course).

(4) Additional vertical, slanted, horizontal, and circular segment combinations are now available.

(5) A clean sock inside is a direct result of eliminating a majority of heretofore necessary floats.

(6) New and obvious features observed in the finished socks, using the new method, make it outstanding and more salable when displayed.

(7) Quality features of lateral elasticity and full body are more evident than in competitive merchandise.

Especially interesting are those features that conserve changing time and parts cost. The only cost for jacks is the initial cost, in that they remain the same for all pat-

Socks made on SCP machines. Middle sock was made without using the WK-A alternate progression method; outside socks used the method. Note sharp edges of patterns on the latter.

terns produced. Thus, the necessity for constructing a new set of pattern jacks for each new pattern to be made, as has been common practice, is eliminated, and a great saving in cost of parts and labor is realized by the mill.

Machines Easily Modified. Another manufacturing advantage is the fact that the WK-A alternate progression system is generally produced on stock SCP and SCOP knitting frames with simple adaptations. These machines are easily modified and the necessity for buying additional machinery costing several thousands of dollars more is not necessary in order to obtain socks of comparable design and generally better quality. The cost of altering the SCP and SCOP machines and adding the necessary new attachments is nominal and makes them ideal for the WK-A method.

Control cams may be produced in quantity at the shop and used on any machine with a WK-A pattern. The length is the same for all identical races. The control cams remain the same for all motif patterning, and the endless task of cutting and fitting cams for each new pattern is eliminated. This of course is a great saving in time, cost, and tempers. This feature also eliminates the necessity to close-up lap areas, in that no close lap areas exist.

Patterns Have Sharp Edges. The keen edges appearing in the patterns where needed have brought favorable comment. This advantage is acquired without the necessity of tucking needles either in a high or low position, or without the necessity of any additional gadget on the machine. This feature gives the finished sock a much neater appearance and has aroused comments from buyers and manufacturers alike. This feature is optional in that some buyers prefer the irregular or "hand stitched look" which can also be produced by the WK-A method.

Still another advantage of the method is the possibility of placing a number of patterned segments about and within a sock body, without floating yarns and without the necessity of shogging levers, either on the jack control levers or the yarn control levers. Thus, it is possible to progress patterned segments independently of each other in many stations about the sock body without using shogging levers. This is advantageous in still another phase in that no cams will ever have to be split or made with two different cam faces on the same cam stock.

The total cost of completely changing from one WK-A pattern to another has averaged about $25.80. This includes $19.80 for conventional parts, if they are used, and $7.00 for labor. To change from one pattern to another usually takes about four hours.

If flexible parts are used (those parts which are permanently attached) the cost is less than $1.00 per machine, and the change time is considerably reduced. This low cost of changing and the speed with which it can be accomplished is probably the most important feature of the WK-A alternate progression method.

Production Features of WK-A. Production features are of interest also. Although some of the more detailed patterns may take up to 24 links in the leg section of the sock, most of the patterns produced have averaged less than conventional lengths. Direct comparison with a different method found the WK-A system to be about three times faster in production.

There is no definite length established for the patterned section of the chain, this being determined by the pattern reprogressions, overtacks, and tack-back stations in the pattern. This feature as well as others is aided by the utilization of the overswing of the knitting cylinder (360°+).

The method is utilized after the top and ring top (if desired) have completed their respective knitting cycles. After entry into the pattern section, operation is considerably different from the conventional methods of knitting. A systematic and harmonious selection system is set up at the No. 1 rack of the forward and reverse selective drums, in cycle relationship with the pattern jack and needle selectivity. Reciprocating action onto the knitting cylinder becomes necessary as the patterning movements continue upon the patterning scanners through a part, complete, or re-cycling of the scanner scope.

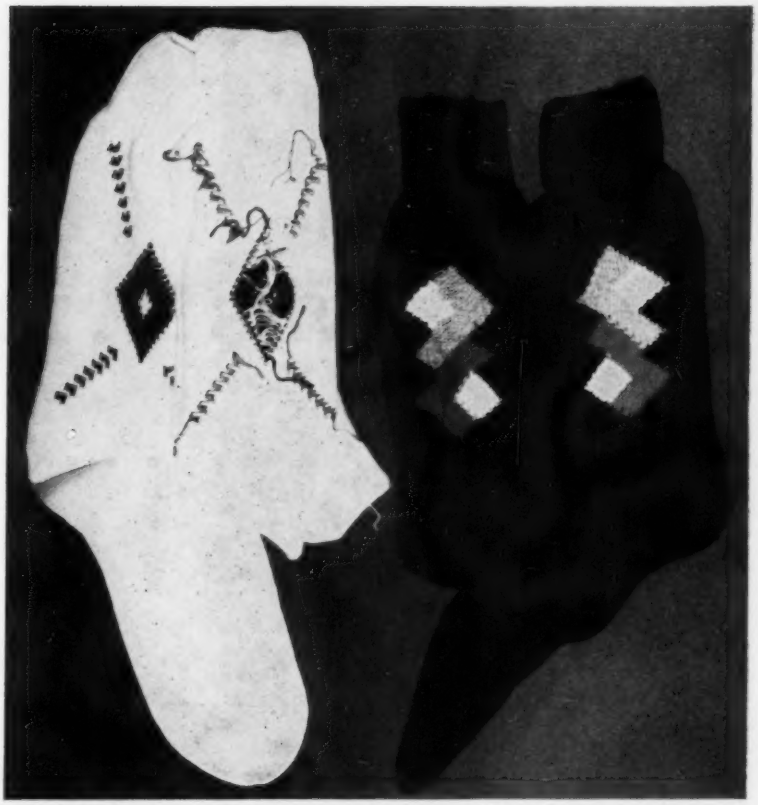
Operation. The scope and use of the method in setting up patterns and control of the various synchronous parts is extensive and departs from conventional theory in a number of ways, but may be simply described by following the knitting of a simple one-figure symmetrical diamond pattern, as follows:

Engaging the first movement "to" on the machine, one-half (or a desired number of the needles) are selected into knitting position from a selecting station. Simultaneously, and directly across from this station, the same or a different number of needles are selected into knitting position upon the same "to" movement. Yarns of the same or different color and texture are fed onto these selected needles, forming a total course, a partial course, or one course and an additional part, or two complete courses of knitted material, as may be desired.

The needles thus knitting from the main feeding station and also from the auxiliary feeding station form stitches directly next to each other out of the same feeding station, the opposite station, or both, as may be desired for certain effects of patterning. The feeding fingers may or may not be disengaged during or at the end of this "to" movement.

A "fro" movement is then activated onto the knitting cylinder. Selection of the desired numbers of needles is made from a third selecting station and from another directly opposite, for the desired continuous or interrupted groups previously determined by the designer for the patterning segments. For the simpler patterns, the yarn feeding stations are momentarily stopped, and a number of other feeding fingers are selected at this point for feeding yarns onto the needles for the next "to" reciprocation.

Selection of needles for this next "to" movement may be identical with the preceding "to" and "fro" selection or it may be different. In the case of a progressive slant, a diamond pattern for instance, the selection would be different. However, if color feed fingers were changed at the end of either the "to" or "fro" movement, the color would naturally be different on those same needles.



The WK-A alternate progression method eliminates most of the floats and makes a sock which is "clean" on inside. Black socks above were made by WK-A method; white socks were not.

The succeeding "to" and "fro" movements of the cylinder are continued throughout the reciprocating phase of the pattern field as selected needles are engaged for knitting. Since the reciprocating movements of the cylinder may swing more than 360°, more than one course can be knitted from a single "to" or "fro" movement.

In the second and all succeeding cycles, a harmonious progression of patterning scanners and selectors controls yarns and needles to form a unique knitted fabric in a solid-color, multisegment design.

Keen edges are formed without tucking by casting off a precourse knitted stitch. This is done by forming the succeeding stitch on the same needle in a way that will carry the released stitch in the direction of its own color segment.

Knitting Sequence. Observing the knitting operation at the machine, the following sequence will be seen on a simple diamond pattern with a single crossed-color overplaid;

(a) No. 1 rack: A body yarn knits onto needles from the main feeding station.

(b) No. 1 rack: A body yarn of the same color knits from the auxiliary station for one-half the needles in the cylinder, plus two additional needles for locking.

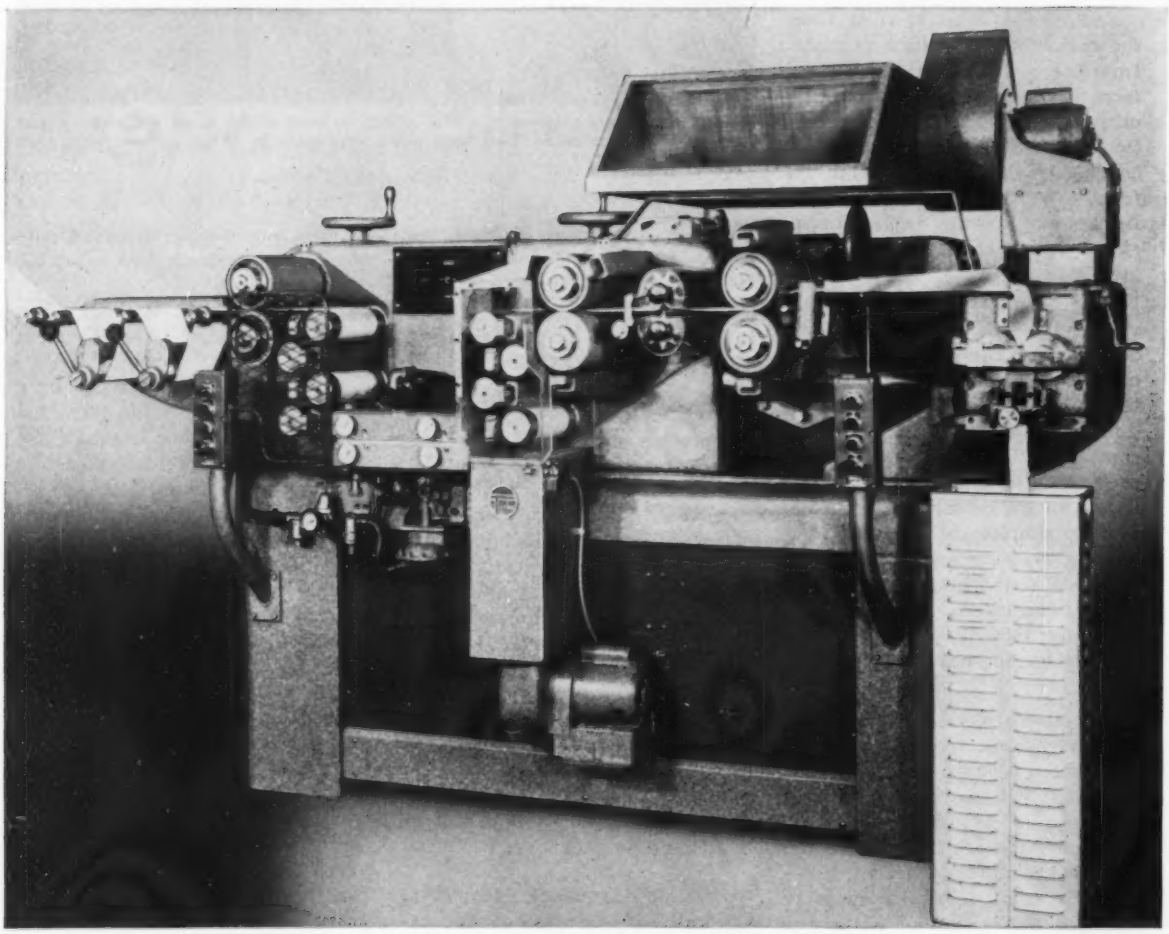
(c) No. 1 rack, "fro" movement: The same body yarn enters into the auxiliary station and the main feeding station; one-half the needles, minus one, are knitted from both these stations. This does not form a complete course—one needle is missing at each of two different sections of the sock body.

(d) Color selections are now activated at the main and/or auxiliary stations. Up to now, all yarns were inactive at the main and auxiliary stations, except the two yarns being used to knit the body. But the situation changes, and all yarns are now inactivated, includ-

Continued on page 300

MACHINES . . . PROFITS

. . . and YOU



Turbo Stapler is used by more than 50 leading spinners to convert synthetic tow to staple.

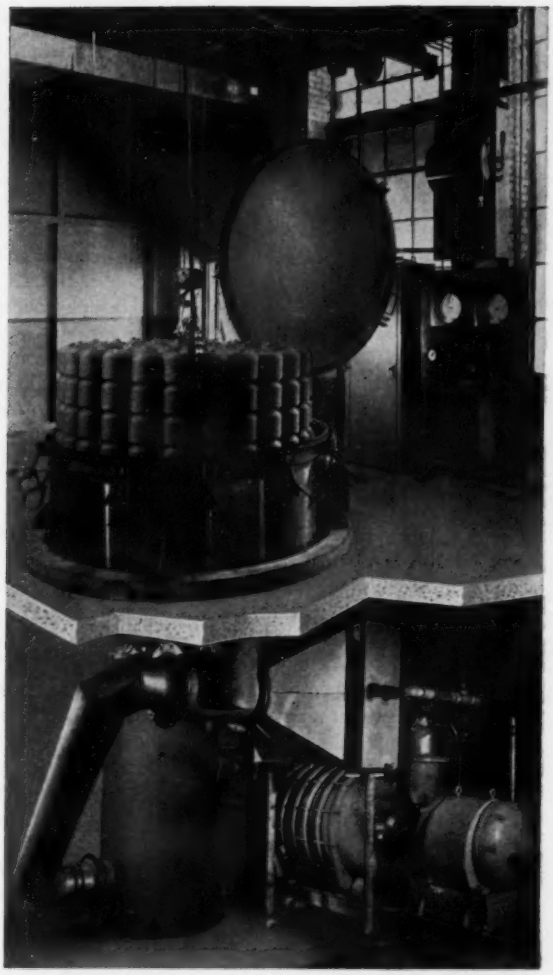
The Mill-Proved Turbo Story . . . .

Turbo Machines are designed and built by engineers, proved under mill conditions, and backed by a strong service-minded organization. Check the competitive advantages of these two machines:

The Turbo Stapler converts synthetic tow to staple. Drastically cuts doubling, drafting, and roving operations. Denier, staple length, and crimp are under the operator's complete control.

The Turbo Extractor-Dryer is a high speed, production machine for natural, synthetic, and blended packaged yarns. It is a recirculating type machine. Does not use compressed air. No air filters required. Features a silent-operating blower, and stainless steel pressure-type kier with precision balanced cover.

Turbo builds a complete range of heat-setting machines for fibers, yarns, fabrics, and finished garments . . . dyeing, extracting, and drying machines for skein and package yarns . . . finishing machines for woolen and pile fabrics . . . Staplers and crimpers for converting synthetic tow to the finest staple.



Turbo Recirculating-Type Extractor-Dryer for packaged yarns reduces space requirements, cuts equipment costs.

Write us your requirements.

TURBO

TURBO MACHINE COMPANY, LANSDALE, PA., U. S. A.

IN RECENT YEARS the most significant trend in the lace industry has been the growth of raschel knitting—it has been estimated that about 60 per cent of the entire lace output is now manufactured on raschel machines.

Besides offering ease and economy of operation, modern raschel knitting offers broad possibilities in lace design and a continually improving quality.

Recognizing the trend towards more economical lace manufacture, the Nylon Finishing & Separating Corporation of Norwalk, Connecticut, began to expand heavily into raschel knitting.

In a short five years the company also became a wholly integrated lace manufacturer with facilities and staffs for designing and knitting, dyeing and finishing, merchandising and marketing.

Organizationally, the company operates under several firm names, all under a parent concern, the Nylon Finishing & Separating Corporation.

The raschel knitting division operates under the firm name of Aristocrat Laces, Inc.; the dyeing and finishing division operates as the Norwalk Dyeing & Finishing Corporation; while lace separation, spooling and packaging are operated by the Nylon Finishing & Separating Corporation.

The company's merchandising and marketing divisions operate under the firm name of Lace Art, Incorporated, with offices in New York City.

Such division of manufacturing and marketing operations, however, does not imply that a large organization exists with numerous managers as divisional heads. Actually, all manufacturing operations and processes are under the direct management of a president, who also serves as plant manager.

The merchandising and marketing activities, on the other hand, are carried on by other officers of the firm, who are specialists in these fields.

In manufacturing size the company is neither small nor large. In its one-story plant there are approximately 30,000 square feet that have been utilized to best advantage, affording a smooth flow of production from one department to another. The raschel knitting department is housed in a modern annex where temperature and humidity are carefully controlled for best knitting conditions. Provisions have also been made for expansion if necessary.

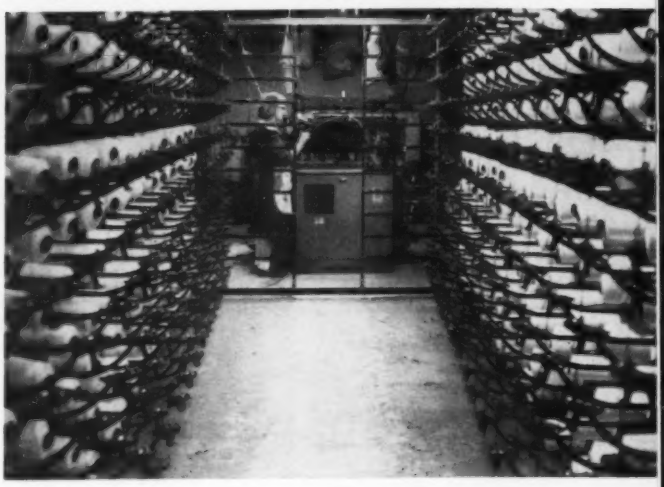
At the time of this writing, a new 24-bar Kidde machine was being installed as part of the company's program of modernization and diversification.

Maurice San Souci, manufacturing president, summarizes his company's program for the future rather simply. "We are always interested in new developments," he points out, "whether in machinery or in fibers, not only to produce lace as economically as possible, but to produce more appealing lace designs of better quality."

There are now 9 Kidde machines in operation, ranging in size from 14 bars to 24 bars. Recognizing raschel knitting to be extremely important, management has taken steps to insure the greatest efficiency possible.

As supervising head of this department, there is

At Aristocrat Laces, Inc., are both sectional (above) and back-winding warping systems—firm knits, dyes, finishes raschel lace.



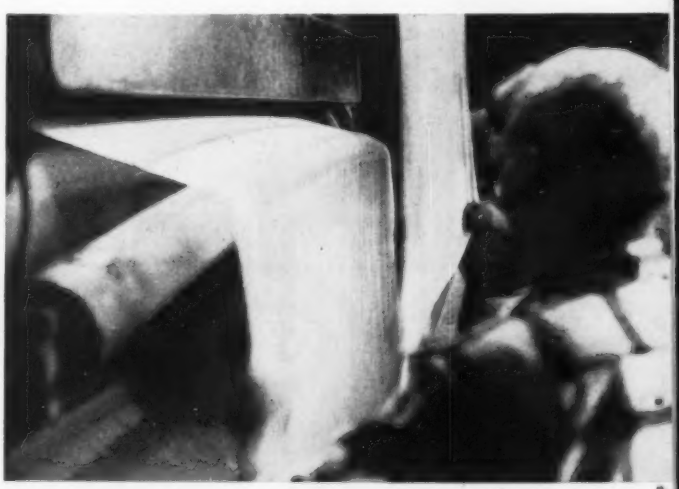
a trained technician who is responsible for the principal phases of raschel knitting: pattern work, making pattern chains, setting and adjusting the machines.

In addition, there are several skilled operators, and a mechanic who has the necessary tools and equipment for repair work in an adjoining machine shop. A lubrication and maintenance schedule has also been established to keep sudden and costly breakdowns to a minimum.

No less important than raschel knitting are the dyeing and finishing operations. These are housed separately but within easy trucking distance of the knitting department.

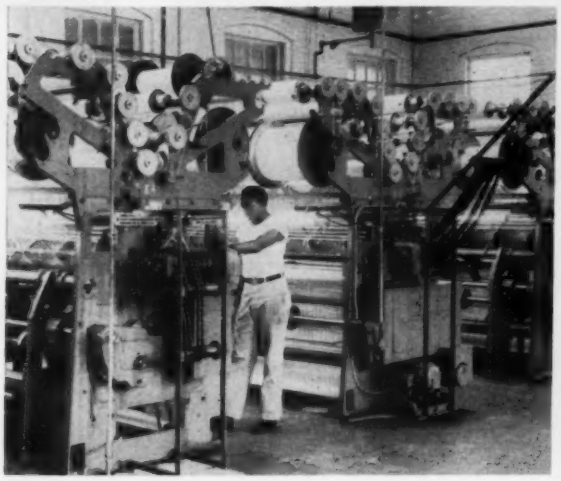
The dyehouse is a long, well-lighted and ventilated room with stainless steel scouring and dyeing becks, hydro-extractors and tumble driers arranged in two rows. There is ample space between them for ease of traffic movement.

Although most of the lace output is only scoured and bleached, the dyehouse is adequately equipped



Here nylon lace is passed through a resin bath that enables lace to retain shape and body and to resist creasing and laundering.

Partial view of the raschel knitting department where nine machines operate around the cloth. Heat and humidity are controlled.



Though much of the lace gets only a scour and a bleach, the dyeing department is prepared for processing and dyeing all fibers.

Integrated lace making

Connecticut firm finds raschel knitting offers broad possibilities in lace design, ease and economy of operation

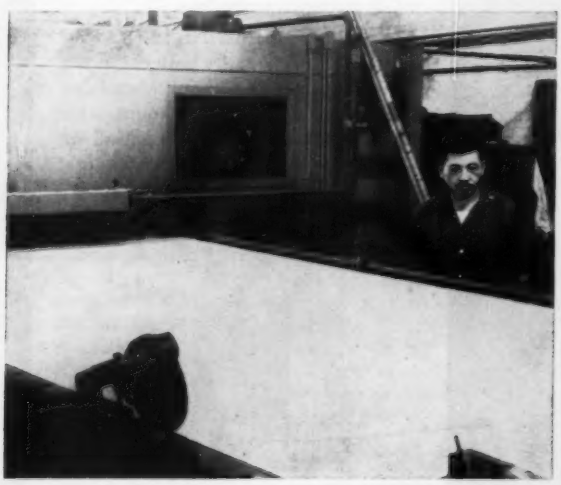
Staff prepared—Exclusive

and staffed for dyeing virtually any combination of man-made fibers. A technical director is at the head of the dyeing and finishing operations and he is also in charge of a quality control and development laboratory.

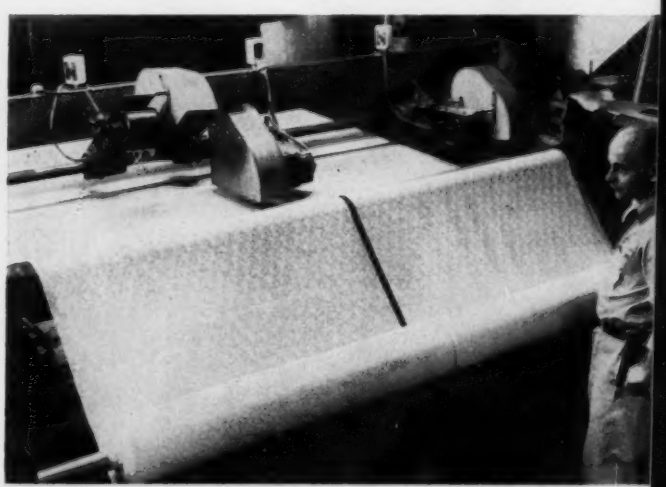
What is interesting to note about the company's dyeing operations is their diversity. Besides processing lace fabrics, which are usually of nylon-acetate or of nylon-acetate-rayon, the dyehouse also processes a knitted cotton fabric in substantial quantities.

A processing route has been established for this fabric, also of raschel manufacture, for uniform results from day to day. The fabric is first scoured, then dyed if necessary, and tumble-dried. Then, it is given a "steam relaxation," stretched to proper width, and packaged for shipment.

Although no special equipment is available for applying vats to cotton, this color class along with many others is applied on conventional dyeing becks. To meet fastness requirements, colors are selected



After resin impregnation, the lace is stretched, dried—exposed to 300 F for two or three minutes—and cured in one operation.



The fabric is inspected, cut, and beamed at the delivery end of the finishing range. The laboratory tests all finished goods.

the one machine for all these styles*

***. . . and countless others**

The "READING" CK-A
Circular Knitting Machine

If your sock machines keep going around in the same old circles, go MODERN, go "READING" CK-A.

The "READING" CK-A 4-feed Machine offers more pattern versatility than any other circular machine — men's and boys' styles; argyles, overplaids, circular sutures, diverse inlaid patterns, mock ribs.

And with the "READING" CK-A you get MORE first quality patterns at the highest production speed. Available in 84, 112, or 168-needle count, with 3¾-inch diameter cylinders. Call or write us today.

Knitting Machine Division
TEXTILE MACHINE WORKS
READING PENNA.
Builders of Textile Machinery Since 1900

from the directs, vats, naphthols, and fiber reactives.

In lace finishing, the trend in recent years has been towards the permanent finish. For the most part, Norwalk Dyeing and Finishing Company applies only resin finishes to impart such important properties as permanence of body and shape, resistance to laundering and creasing, and to give a crisp, resilient hand.

For the time being, the company's finishing range is more than adequate to meet knitting output. It is a modern, gas-fired range, capable of finishing fabrics up to 144 inches in width, and equipped with automatic temperature controls for drying and curing in subsequent stages.

Fabrics which are resin-treated are impregnated and squeezed, stretched to width, then dried and cured—in one continuous operation. Curing requires about 2-3 minutes at about 300 degrees F. At the delivery end of the range the fabric is cut, if necessary, and beamed.

In the case of lace trimmings, removal of the nylon threads follows the finishing operation. Then, the individual bands are spooled and packaged for shipment.

After leaving the finishing operation, the fabric is separated into individual bands or edgings. This hand operation calls for dexterity in removing the nylon separator threads. Apparel laces, which are made up into dress fabrics, are shipped in wider widths. In the final phase of plant operation, the lace bands are spooled and packaged for shipping.

The company's position in lace manufacturing and merchandising has become stronger through modernization and through the build up of experienced plant personnel. At the present time, management's main objective is to maintain this position.

However, with adequate equipment at its disposal, together with a competent plant staff, management is in a very good position to diversify further into raschel knitting, which is perhaps the most versatile of all knitting operations.

Newly formed institute to promote tricot fabric consumption

■ THE NATION'S tricot industry has embarked on an industry-wide promotion program with the formation of the Tricot Institute of America, Inc.

According to Charles E. Lovett, Deering, Milliken & Co., acting president, an initial budget of $50,000 has been allocated to launch the Institute. He also noted that within two years the group expects to spend at the rate of $200,000 annually for the promotion program, which will ultimately include an advertising campaign.

The funds to support the new association will be obtained from members whose plants range in size from 12 to 300 machines. (There are 3,263 tricot machines in the United States.) Each contribution will be based on invested capital, which is calculated by the number of tricot machines the member-firm has in its plant. Three categories for the size of contributions have been formulated: (1) up to 24 machines; (2) 25 to 48 machines; (3) more than 48 machines. Each category's contribution will be approximately equal, Mr. Lovett said. It is expected that most of the 120 tricot mills in the United States will become contributor members.

In addition to the mill operators, who will be classified as "active members," he added, additional funds will be forthcoming from "associate members" who represent related companies, such as yarn producers, machinery manufacturers, dye plants, chemical companies, and factors.

Noting the success other industries have had with their own management groups, Mr. Lovett said this institute has been formed to help the tricot industry "secure an ever increasing share of the market by a continuous and saturating promotional effort."

In 1959, for the first time, the tricot industry passed the half-billion yard production figure, it was pointed out. This means the mills shipped an estimated $200,000,000 worth of tricot fabric to garment manufacturers.

The growth of the tricot industry in recent years is revealed in available statistics. In 1946, there were 1,729 tricot machines in the United States; in 1950, there were 2,497; and in 1959, the count was 3,263. At present, almost one million people are involved directly and indirectly in the tricot industry, according to an Institute estimate.

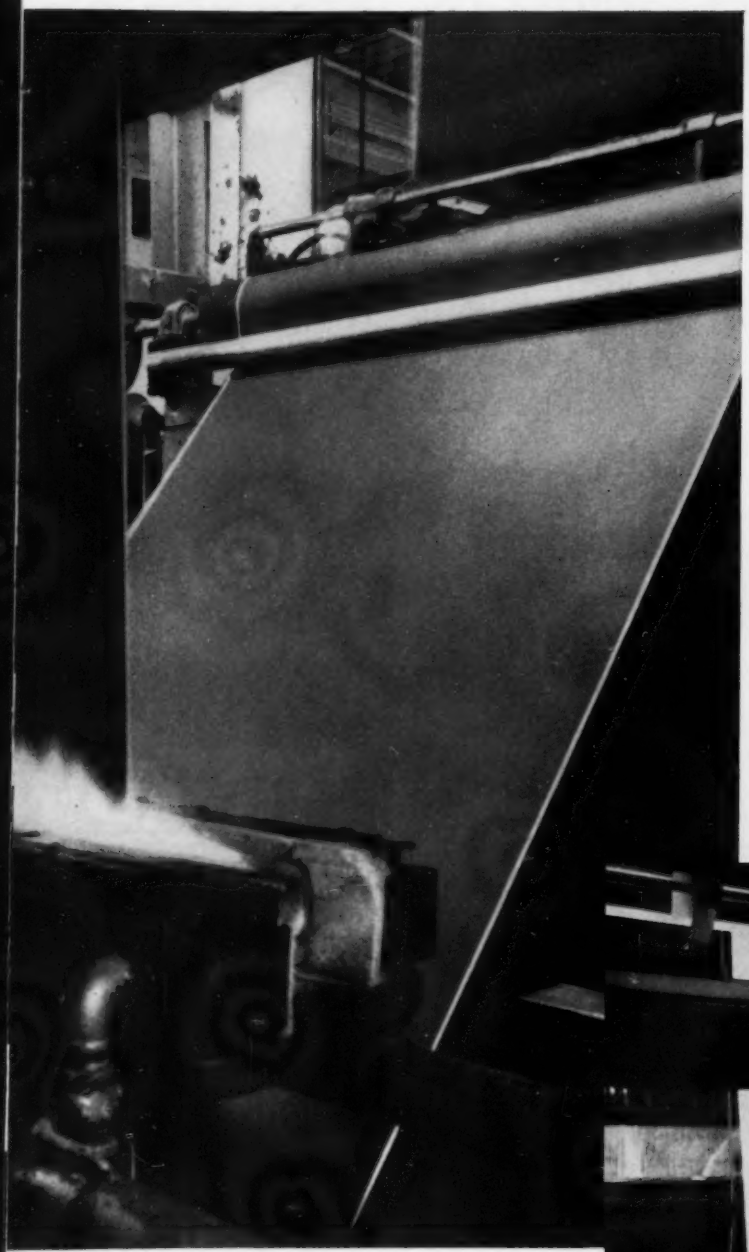
The objectives of the Institute, as outlined in the by-laws of its charter, are: to promote the interests of companies in the tricot industry; to establish production standards; to disseminate information to its members as well as to manufacturers, retailers, and consumers; to consider legislative problems affecting the tricot industry; to establish cooperative procedures with related industries; to conduct research to members in marketing and promotion.

GAS *equipment*
can help you
increase production speed
improve quality
reduce maintenance costs

Modern gas equipment can help you solve your heat problems.

Only gas gives the precisely controlled, economical heat at high enough temperatures needed in the curing or setting of modern fabrics and finishes. The volume of heat, the temperature, and the method of application varies widely, but recent advances made in the design of gas equipment insures the flexibility demanded for economical operation, increased production, and improved quality.

Furthermore, gas provides a large volume of heat in a small area, increasing production



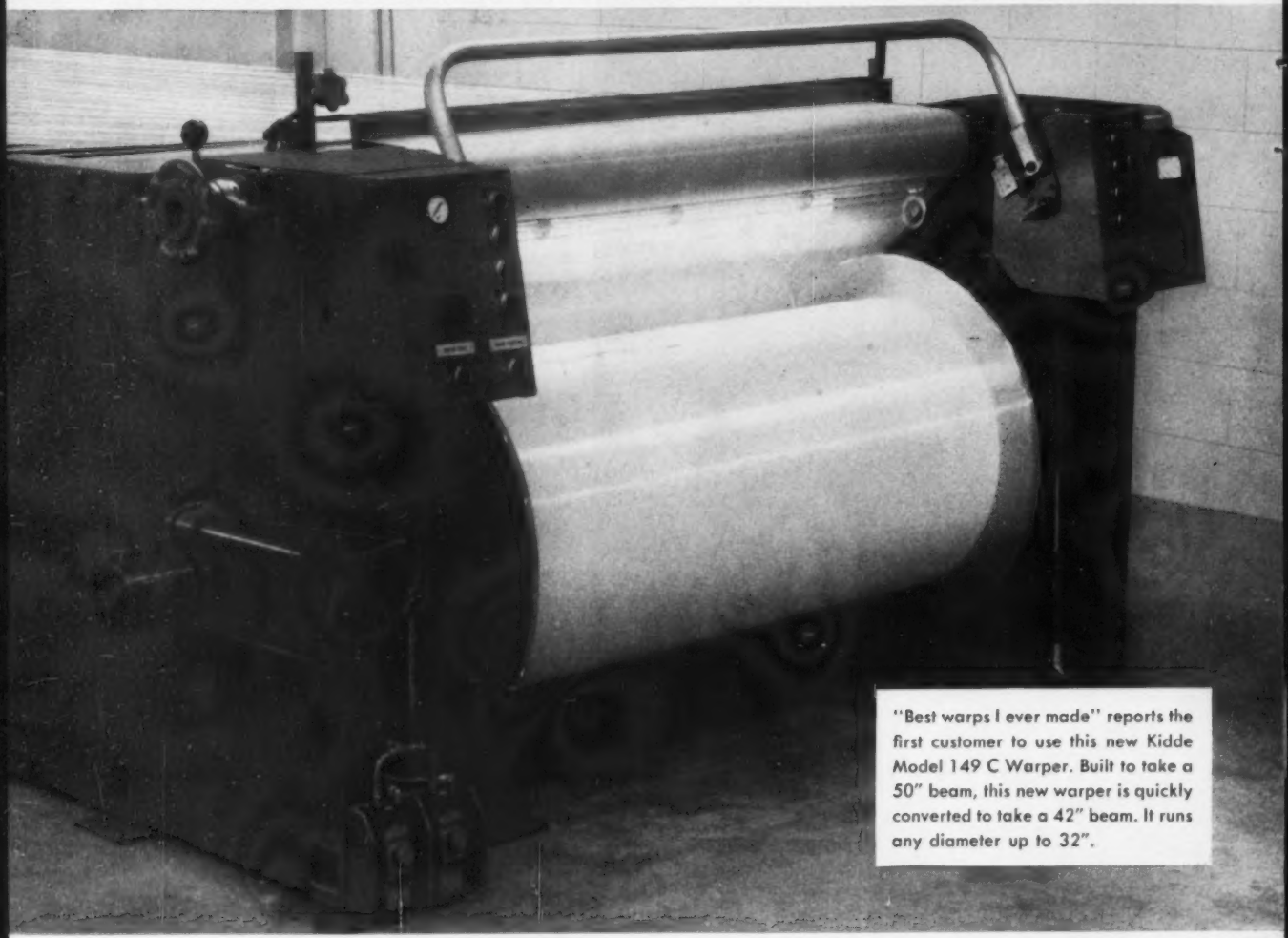
Eliminate multiple passes – singe in one pass any fabric presently known with modern gas-fired equipment. Even high quality corduroy can get an exceptionally uniform singe in a single pass.

Gas-fired radiant burners can speed up your drying and setting of coatings or adhesives. Also eliminates sticking of adhesive to the first drying cans; reduces maintenance costs substantially.

speed with a small investment. Eliminate the purchasing of longer frames and expensive housings with the use of all new modern gas equipment or auxiliary burners.

For all textile heating applications – for singeing, Tenter Frame Drying, loop drying, nylon setting, calendering, can drying and setting of coatings – check with your gas company specialist on textile operations. He'll show you the economies and results you can get with modern gas equipment especially designed for the textile industry. *American Gas Association.*

COME AND SEE THEM IN OPERATION AT THE ATMA SHOW! ATLANTIC CITY—MAY 23-27, BOOTHS 478—81



"Best warps I ever made" reports the first customer to use this new Kidde Model 149 C Warper. Built to take a 50" beam, this new warper is quickly converted to take a 42" beam. It runs any diameter up to 32".

Every KIDDE WARPER gives you the smoothest, most even warp beams in the business

Kidde warpers are *engineered* to give you smoothness and evenness in yarn buildup that's unmatched by any other machines you can buy. Here are a couple of reasons why:

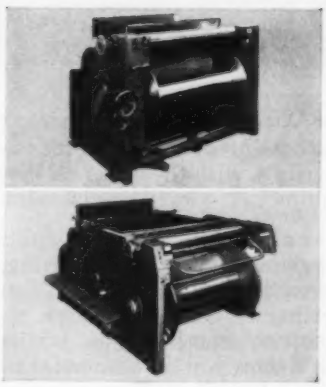
Instead of just one cylinder on the compression roller, Kidde gives you *two* – hydraulically operated – one on either end of the roller, for perfectly balanced pressure that eliminates bounce and chatter. And powerful brakes stop the beam within one revolution and automatically adjust themselves. What's more, the brakes on the measuring roll, compression roller and beam are electronically synchronized so yarn is never scuffed.

When used with a Kidde accumulator, both warper and accumulator are electrically synchronized. This maintains even tension when yarn must be backed off to pick up a lost end.

These are only a few major advantages of Kidde warpers. Get the full story of their trouble-free operation by contacting:

This Kidde warper handles beams up to 21" in diameter, made in three sizes: 21, 42 or 50 inches long. Every part is easily accessible. Regardless of size, any Kidde warper can be doffed automatically — even by a girl. Hydraulics do the work, at the touch of a lever.

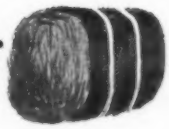
Kidde high speed cotton system warper handles 54" section beams with flange diameters up to 36". Has all the quality features of other Kidde warpers with speeds up to 1,000 YPM.

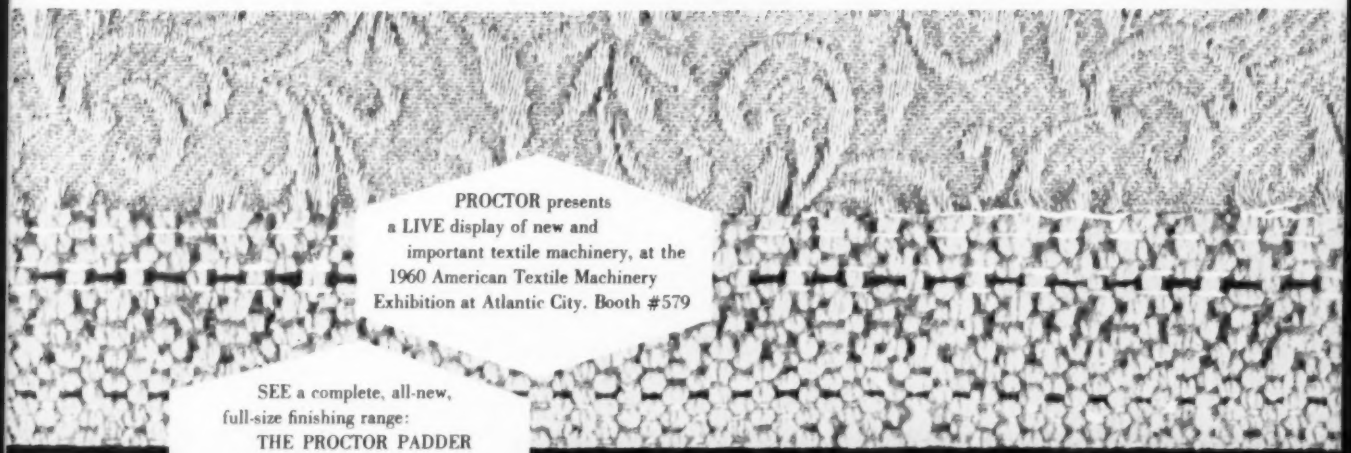


TRICOT AND RASCHEL MACHINES • TRICOT WARPERS • HORIZONTAL WARPERS • BEAMERS
CREELS • SLASHERS • WINDER-REDRAWS • TENSOMETERS • TENSION COMPENSATORS

Kidde TEXTILE MACHINERY CORPORATION — BLOOMFIELD, NEW JERSEY

The word KIDDE is the trademark of Walter Kidde & Company, Inc., and its affiliated companies.

fiber  ...to fabric Proctor



PROCTOR presents
a LIVE display of new and
important textile machinery, at the
1960 American Textile Machinery
Exhibition at Atlantic City. Booth #579

SEE a complete, all-new,
full-size finishing range:
THE PROCTOR PADDER
features new versatility
through manually set,
multi-position rolls.

THE PROCTOR FLOAT DRYER
air cushions cloth as it drys,
free of marring, wrinkling
and excess tension.

THE PROCTOR UNIVERSAL TENTER
combines a revolutionary tenter
chain design with an improved,
low-height housing.

THE PROCTOR CONTINUOUS
ROTARY POLYMERIZER
cures at high capacity with an
amazing saving in floor space.

SEE a live demonstration of
these cost-saving, quality
improving, fiber handling units.

THE PROCTOR-FORM
The only non-woven web forming
equipment which produces a web
with fibers up to 6" in length without
shortening or damaging fibers.

THE PROCTOR
CONTROLLING WEIGH BELT
more accurately controls the
rate of feed of fibers.

THE PROCTOR BLENDING FEED
assures absolute uniformity
of blended fiber stock.

These new and improved PROCTOR
products promise new standards of
capacity and quality to a modernizing
and expanding Textile Industry.

ATMA
American Textile Machinery
Exhibition - International

PROCTOR & SCHWARTZ, INC.
Seventh Street & Tabor Road
Philadelphia 20, Pa.

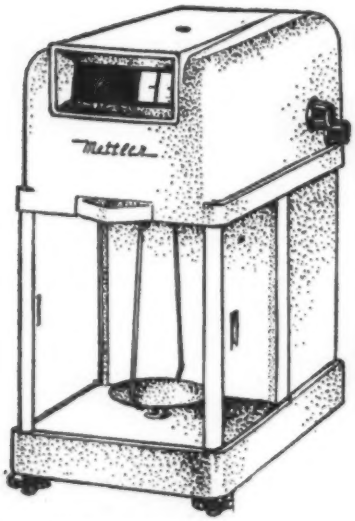
Proctor ®

METTLER SCALES and BALANCES

FOR THE

TEXTILE PROCESSING PLANT and LABORATORY

- **WITH MAGNETIC DAMPING FOR HIGH SPEED**
- **WITH WIDE OPTICAL RANGE FOR ACCURACY AND CONVENIENCE.**



Type H-23 C 10/13

MULTI-PURPOSE BALANCE

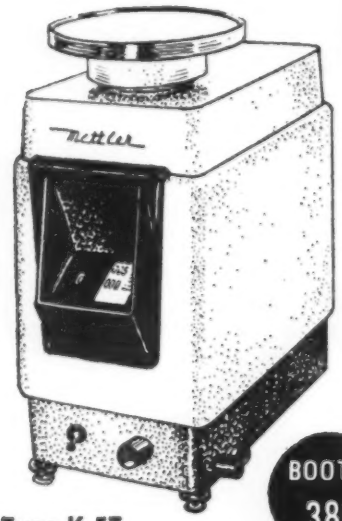
Type H-23

The perfect instrument for all weighings to 160 grams requiring an accurate third decimal. Particularly fast and convenient for work within the optical range of 10 g. Precision: ± 1 mg.

TEXTILE YARN BALANCE

Type H-23 C 10/13

A specialized unit with optical scales calibrated in cotton count and Tex units in addition to the standard 10 gram optical scale. Weighing on this balance is very simple: Place yarn sample on pan, release beam, take reading.



Type K-5T

PRECISION SCALE

Type K-5T

A versatile and compact scale for very rapid and accurate weighings. The pan on top is completely unobstructed. Easy taring of containers up to 500 g. Capacity: 2000 grams. Range of optical scale: 1000 grams. Readings are accurate to ± 0.2 g. Also available in pound and ounces or pound and decimals calibration.

PRECISION SCALE

Type K-7T

This unit, of the same basic design as the K-5T scale, has smaller capacity, but is more accurate. Capacity: 800 grams. Range of optical scale: 100 grams. Readings are accurate to ± 0.03 g.

Also available in grain calibration with capacities of 1000, 2000 or 8000 grains.

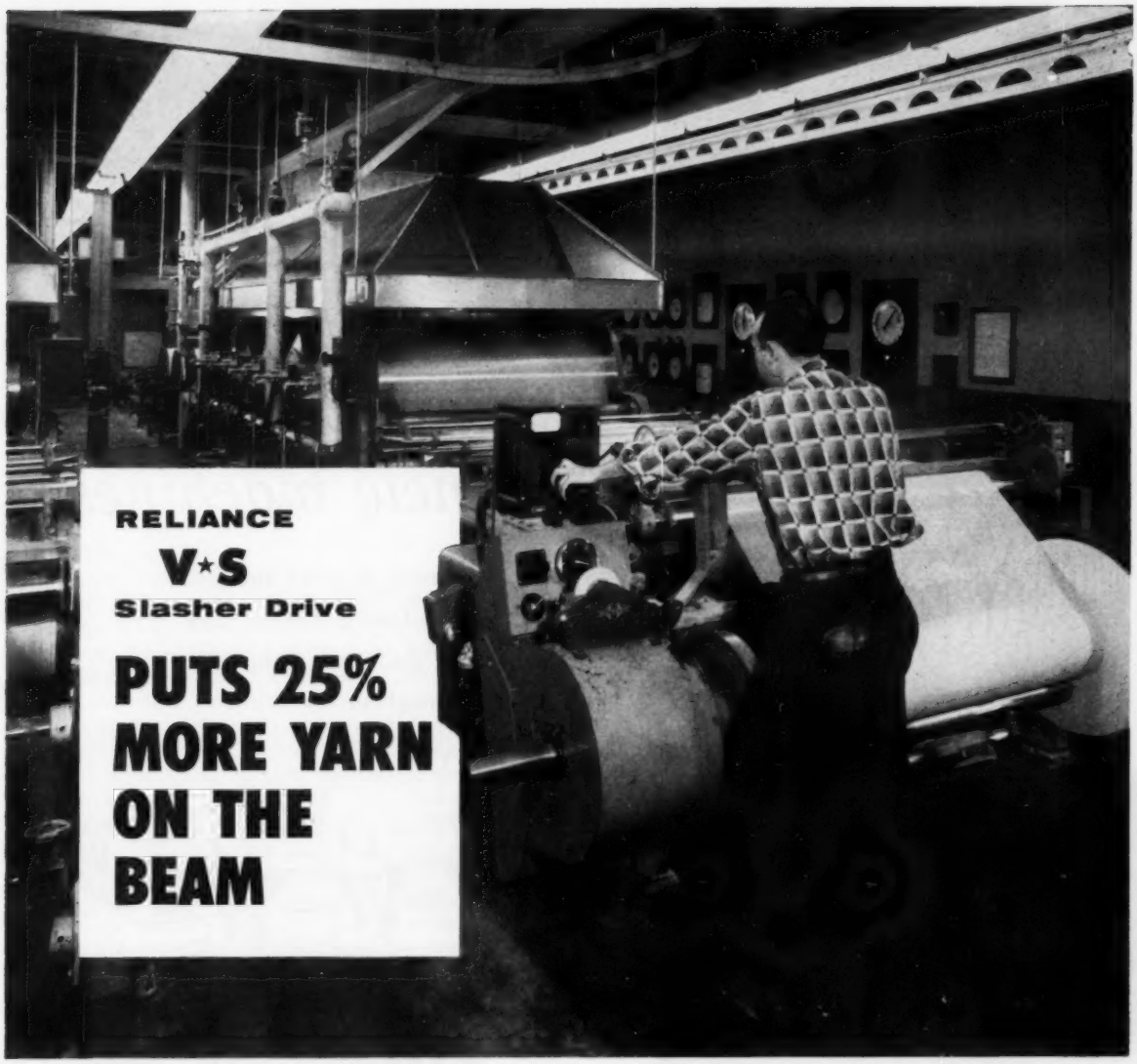
BOOTH 381

AMERICAN TEXTILE MACHINERY EXHIBITION
May 23-27, ATLANTIC CITY, N. J.

A file of descriptive literature is available on request. Write for it today.

METTLER INSTRUMENT CORPORATION

HIGHTSTOWN, NEW JERSEY



RELIANCE V★S Slasher Drives give you exacting tension control. Yarn tension is uniform from empty to full beam.

Uniform tension adds to weave room efficiency and also puts more yarn on each beam. A leading textile mill finds it can put 25% more fine count cottons on a beam with their new Reliance powered slasher.

Tension is accurately maintained through the whole speed range of the slasher, 4 to 140 ypm. Ends are handled gently with cushion starting and stopping. Put more productivity into *your* sizing operation by specifying Reliance as your next slasher drive.

For more information on Reliance V★S Slasher Drives, contact your local Reliance Representative or write today for Bulletin D-2506. L-1590

Product of the combined resources of Reliance Electric and Engineering Company and its Master and Reeves Divisions

RELIANCE ELECTRIC AND ENGINEERING CO.

DEPT. 205A, CLEVELAND 17, OHIO
Canadian Division: Toronto, Ontario
Sales Offices and Distributors in Principal Cities

Duty Master A-c. Motors, Master Gearmotors, Reeves Drives, V★S Drives, Super 'T' D-c. Motors, Generators, Controls and Engineered Drive Systems.

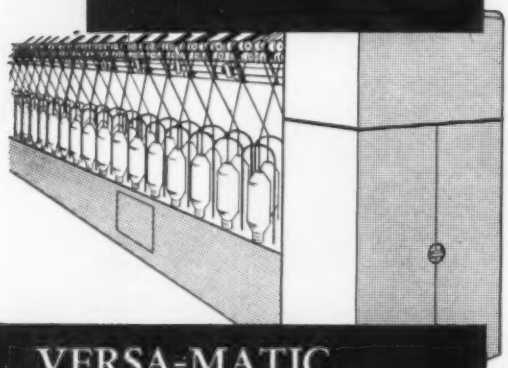
Only SACO-LOWELL *has these exclusive, new machines*

Continued proof that Saco-Lowell sets the pace for the textile industry throughout the world

ROVEMATIC

an entirely new concept in spindle and flyer arrangement*. The unique design does away with heavy traversing carriage, carriage lifter mechanisms, counter balance weight and horse-head drive.

*U.S. Patent No. 2,898,729
Other patents pending

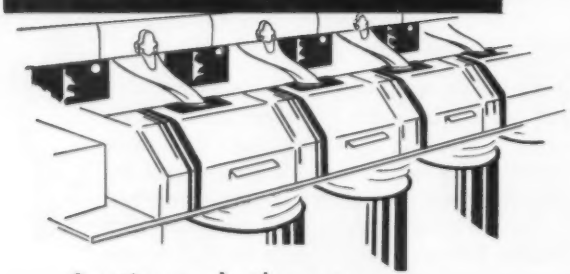


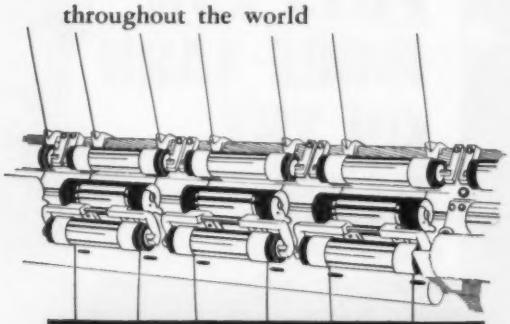
VERSA-MATIC

AUTOMATIC DRAFT CONTROL*

produces most uniform sliver ever obtained by means of electronically controlled drafting. Yarn produced from Saco-Lowell/Uster Versamatic ADC drawn sliver has highest strength, exceptional evenness and unsurpassed quality. *In the case of combed stock, only one drawing process is required instead of two.*

*Patented with other patents pending





New Model

MAGNEDRAFT*

uses forces of magnetic attraction to produce required roll pressures. Eliminates anti-friction top and bottom rolls and all conventional weighting apparatus. New front top roll support allows quick "end-around" piecing. Requires no lubrication in drafting zone. Gives cleanest, most efficient operation of any spinning drafting element ever developed.

*U.S. Patent No. 2,686,940

See these and other new Saco-Lowell machinery developments at the A.T.M.A. Exhibition, Atlantic City, May 23-27, Booth 482

THE STANDARD OF QUALITY AND PERFORMANCE Since 1813

Saco-Lowell Textile Machinery Division

SACO-LOWELL SHOPS

Executive and Sales Offices: EASLEY, SOUTH CAROLINA

Branch Sales Offices: ATLANTA, GA., CHARLOTTE & GREENSBORO, N. C., GREENVILLE, S. C., SACO, ME.

HOW OTHERS MANAGE

Test discloses sulfur or sulfides remaining in rayon

THE EDITORS

In the manufacturing of rayon, sulfur and sulfides are produced within the fiber during the regeneration of cellulose from sodium cellulose xanthate. Normally, the sulfur and sulfur compounds are removed in the desulfuring stage by treatment of the fibers with either NH_4S, $NaHSO_3$, or Na_2S.

However, it is possible that the sulfur or compounds of sulfur, or perhaps the desulfuring chemicals, are not completely removed during the washing operation following desulfuring. In addition, some rayon tow, staple, and filament yarns made on certain types of machines are not desulfured.

The sulfur or sulfides left in the rayon can have several disadvantages. First, the sulfur or sulfides left in the fibers can adversely affect the shade of certain direct dyes subsequently applied. Secondly, the sulfur compounds left in the fibers to be used for making undyed silver cloth* can cause undesirable tarnishing of silverware.

The test below outlines a method of testing rayon fibers for the presence of sulfur compounds.

Apparatus and Materials:

Heating means, 97-100 C
1000 ml beakers
Glass stirring rods
False porcelain bottoms for beakers.

Dyebath:

0.148% Ciba Chlorantine Blue 2RLL*
0.064% Sandoz Orange 4G*
0.054% Sandoz Rubine BLN*
1.0 gram Orvus Flakes
10.0 mls of saturated brine
Total volume of dyebath, including water: 425 ml.

* Based on weight of fiber sample

Test Specimens:

Each test specimen of rayon should weigh 4.0 grams

Procedure:

The test specimen is placed in the cold dyebath and the temperature of the dyebath is promptly raised to 97-100 C. The dyeing is

*For lining boxes in which silverware is stored or displayed.

Get your ideas into this new kink contest

Every kink, short-cut, time-saver, or quality improvement suggestion entered in the contest will be paid for immediately upon acceptance and the $100 award will be made as soon as all entries are judged.

The contest rules are simple:

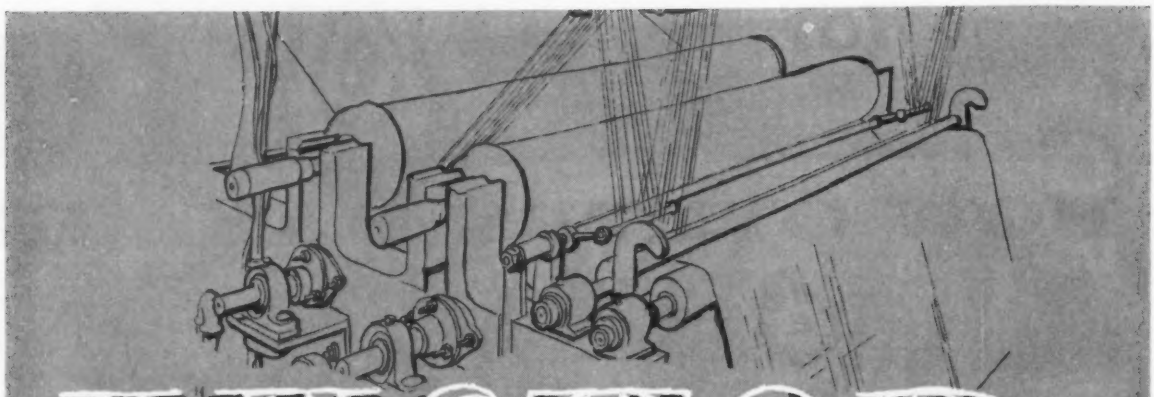
► All contributions must be postmarked not later than midnight, August 15, 1960.

► No limit to the number of entries an individual may submit in any one contest.

► All entries paid for upon acceptance — no waiting. Extra payment for photographs that are usable. Extra consideration is also given kinks accompanied by legible pencil sketches or drawings.

► Entries must not have been published previously and must not be submitted to any other publication.

Send your contest entry to: The Editors, TEXTILE INDUSTRIES, 806 Peachtree St., N. E., Atlanta 8, Georgia.



VICTOR Mill Starch

A KEESTAR PRODUCT

There is no substitute for Uniformity and Keever Service.

if he's a Keever Man, he's the Weaver's Friend

THE KEEVER STARCH CO. • General Offices • Columbus 15, Ohio

Processors of corn, wheat and blended starches for industry since 1898

Charles C. Switzer, Vice President
TEXTILE SALES DIVISION
118 SOUTH PLEASANTBURG DRIVE
GREENVILLE, SOUTH CAROLINA

continued, with frequent stirring, for 60 minutes. Then specimen is rinsed in 250 ml of cold water, extracted, and dried in steam oven.

Caution: The dyestuffs used in this test should not be mixed before adding to dyebath.

Evaluation:

The test specimen is compared with standard dyeings and is assigned a value nearest to the standard which is most closely matched in shade. The standard dyeings have been rated as follows:

A Reddish medium gray (no sulfur present)

B-C Slightly less red and blue than A (traces of sulfur present)

D-G Steel gray (moderate amount of sulfur present)

G-H Dirty, greenish (considerable sulfur present)

K Light tan (undesulfured rayon)

Conclusions:

It has been found that dyeings rated A through C cause no appreciable trouble in shade matching. However, D through K ratings cause undesirable shade changes during the dyeing operation, and, in addition, increase the amount of dyestuff required to produce a certain depth of color.

Fibers to be used for the silver cloth trade should be rated no lower than A, as even traces of sulfur or sulfur compounds cause tarnishing of silverware.

JAMES H. COX
Auburn University

Remove hit-or-miss from nylon package tare

THE EDITORS:

The winding department producing 6-ounce cones of nylon plyyarns came to the conclusion that their method of checking the weight of finished cones was a rather hit-or-miss affair.

When the cones were full, the machine operator would place the full cone on the scale at her place. At the same time she put an empty cone on the pan at the other side of the scale to take care of the tare.

However, she took any empty cone conveniently at hand. It occurred to management that with this method there might be a loss to the company, since nylon is expensive.

So it was decided to send twenty empty cones to the testing laboratory to have each one checked individually for weight. This was done and the figures, including the average, the high and the low, and the percentage of variation are shown in Tabulation T1, Table 1.

The spread between the high of 2.14 oz and the low of 2.00 oz seemed quite an item and it was felt that if one extreme was used the company would be giving extra material to the customer. On the other hand, the customer would be "short-changed" if the cone of the other extreme was used.

To investigate somewhat further, the 20 weights were divided into two groups of 10 cones each and checked for averages, etc. These are shown in Tabulations T2 and T3, Table 1.

The average of the two sets of 10 weights was checked statistically and the difference was not considered significant. It was, however, finally decided to use the average of the 20 weights (i. e., 2.-08 ounces) as the standard. The empty cones in stock were checked for weight, and several of the desired weight were picked out. They were colored for identification and given to the machine operators to be used as standard tare.

Every three months a hundred empty cones were to be sent to the laboratory and checked for weight, and if there were any marked change in the average a new set of standard tare cones was made up.

CONTRIBUTOR No. 1208

TABLE 1

Weights of Empty Cones Used with Nylon Yarns

T1 Cone number	Weight in ounces	Cone number	Weight in ounces	T2 Cone number	Weight in ounces	T3 Cone number	Weight in ounces
1	2.13	11	2.11	1	2.13	11	2.11
2	2.04	12	2.03	2	2.04	12	2.03
3	2.09	13	2.07	3	2.09	13	2.07
4	2.09	14	2.00	4	2.09	14	2.00
5	2.12	15	2.04	5	2.12	15	2.04
6	2.14	16	2.08	6	2.14	16	2.08
7	2.07	17	2.04	7	2.07	17	2.04
8	2.07	18	2.08	8	2.07	18	2.08
9	2.13	19	2.10	9	2.13	19	2.10
10	2.10	20	2.09	10	2.10	20	2.09
Average			2.08		2.10		2.06
High			2.14		2.14		2.11
Low			2.00		2.04		2.00
% variation			0.067		0.048		0.053

Some yarn variation causes

THE EDITORS

Many mills are plagued with the problem of light ends on warp and filling yarns. A sample of the cloth containing such yarns, when held against the light, appears to suffer mixed yarns. Spooling and warping stops from broken ends are very high and loom stops are really cutting into production.

Now what does cause this? This irregularity in yarn size can be traced to the pickers, the cards, the lappers, and to the drawing

Bolster Briefs

by Ron Kinney

Manager, SKF Textile Sales

During the past twelve years, Ron Kinney has attended all of the major U. S. textile industry trade shows. Ron, of course, will be on hand to answer questions in person at the American Textile Machinery Exhibition in Atlantic City, May 23-27. Look for Ron *at Booth 29, on the stage.* This month he devotes his column to the show and to SKF's participation in it.

How do you think the 1960 American Textile Machinery Exhibition is "shaping up?" How successful do you think it will be?

From what I've seen and heard, this should be the biggest, most important trade show in the history of the textile industry. There'll be more than 400 exhibitors displaying their latest products and technical advances. Mill executives from every textile area in the United States, and from every textile manufacturing country in the world, will attend. The Exhibition should be a tremendous success – and, of course, SKF will be on hand with all our latest developments for the textile industry.

What does SKF intend to show at the Atlantic City Exhibition? What do you plan to feature?

We'll exhibit several interesting new units that will be well worth your seeing. Among others, we'll unveil our new "PK Series" Pendulum Weighting Arms. They're designed for high-quality, center suspension drafting of cotton, synthetic, woolen and worsted yarns. You'll actually see them in operation. Along with the weighting arms, you will see the SKF "Draftrite" Top Rolls. These Top Rolls will be installed on the four SKF Spintesters to be exhibited at the show.

And we'll be showing our new HF High Speed Roller Bearing Bolster, designed for cotton spinning, and our new HZ Roller Bearing Bolster for heavy-package, high speed twisting. I think you'll be especially interested in seeing the vibration-free operation of the SKF-equipped spindles.

What materials are you planning to demonstrate on the Spintesters?

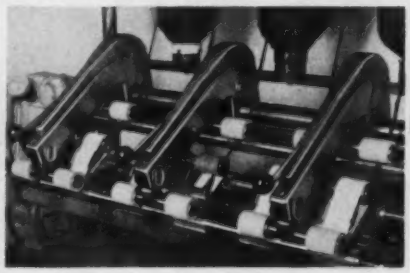
We plan to demonstrate the drafting and spinning of cotton, synthetic, woolen and worsted yarns.

6011

GOT A PROBLEM?
SEND YOUR QUESTION TO
"BOLSTER BRIEFS".
c/o SKF INDUSTRIES, INC.
P. O. Box 6731,
Philadelphia 32, Pennsylvania

See for yourself how these new SKF textile products can save time and money for you!

At Booth 29 on the stage, American Textile Machinery Exhibition



See for yourself how SKF's new "PK" Series Pendulum Weighting Arms, "Draftrite" Top Rolls and Tension Pulleys give you better results—in spinning cotton, synthetic, woolen and worsted yarns.

See how the new SKF "HF" Roller Bearing Bolsters provide more profitable production of quality yarn—because of their smooth acceleration, vibration-free operation and precision plumbing.

For details and literature, call GArfield 6-6400 or write: SKF Textile Division — Philadelphia, Pa. or Charlotte, N. C.

Spherical, Cylindrical, Ball, Timken® Tapered and REED Miniature Bearings

EVERY TYPE—EVERY USE SKF®

SKF INDUSTRIES INC. PHILADELPHIA 32, PA.

and roving frames — not to mention the spinning frames.

To start with, how often does the reader test his finisher lappers yard by yard for weight per yard? Would the reader think it no trouble to find several weights of lap this way?

One great cause of the trouble are the top and bottom screens at the front of the picker, in front of the evener motion.

If either or both screens is beaten down, full of sumps caused by chokes, etc., that low spot in the screen will collect more than its share of the cotton on each revolution. Following that heavy spot is a corresponding light place at the lap. Let's look at it this way.

Say there is a 12-ounce lap being prepared and that each bent place in the screen takes up 50 per cent more cotton than it normally would.

That portion of the lap immediately under the sump will weigh 16 ounces, while the following portion can weigh only 8 ounces. Total lap weight remains the same but yard to yard variation climbs.

Now most card laps are about 52 yards in length and most cards draft about 100. In the card the heavy streak in the sliver or lap is reduced porportionately, but so is the light place in the lap.

The 52-yd lap becomes 187,000 inches of light and heavy sliver. By the time that sliver has passed through the drawing, roving, and spinning processes, its length has literally gone completely out of sight. And all that is caused from a lump or sump in a picker screen!

Other causes of unevenness include bad lap splicing, bad sliver splicing, crooked feed rolls, stripped teeth, etc. Anything in the way of loose brackets on the side shafts or in play in the doffer that can cause a tooth to slip across a tooth without turning a gear will produce similar results.

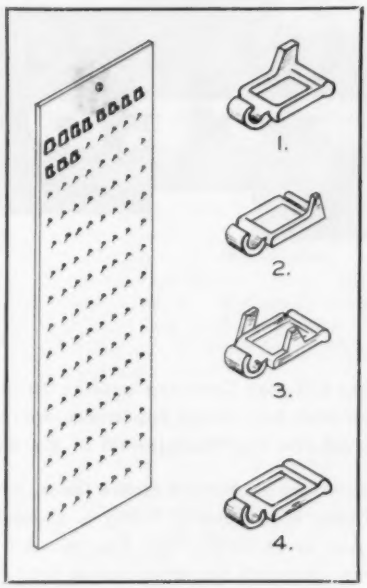
Even a gear bored off center will cause an eccentric motion that will feed heavy and light places into the sliver.

Putting the end up too soon after the card is stripped will also produce thin places in the sliver. Remember that a card is likely to be stripped two or three times each shift, and if that stripping frequency is multiplied by the number of cards in the room an idea can be gained of the number of light places introduced from that source.

Usually it is safe to put up the end at one card only after 3 to 5 other cards have been stripped.

CONTRIBUTOR No. 1235

Keeps circular knitter chain links in order



THE EDITORS:

Even in a small circular knitting plant which uses link chains or belts, there are usually on hand several hundred extra replacement links, or various links using different type lugs for use in setting up new patterns or in the changing of sizes, construction, or style. These extra links are usually thrown into a common reservoir (box, bucket, or bag) with all of the different types of links together.

To find a link desired, it is necessary to fumble through an enormous number of other links (very time consuming). Often the desired link is never found, although there may be several in the reservoir somewhere.

To eliminate this trouble, and to provide a constant inventory, we have made a "link board" for each style of link. When a link is bought for replacement or taken off of a machine, it is hung onto the proper board for that link.

For example: if a link is taken off the machines with a lug on the left side (1) as shown, it is hung onto the board designated for that link. Links with lugs on the right side (2), both sides (3), or plain links (4), likewise are hung onto their respective boards.

Therefore, if a plant has a supply of 200 links each of four different types, to find a certain link the fixer can immediately eliminate 600 links of other types because they will be on the other boards. This is a tremendous time saver.

To make a link board, we cut a section 12" x 48" from ½-inch plywood. Into this board we drive small nails, ¾" long, approximately 7/16" deep, one inch apart, and in rows one and one-half inches apart.

CONTRIBUTOR No. 1199

On "dirty" spinning

THE EDITORS

Sometimes it pays not to get excited over what appears to be "dirty" spinning—I recall an example of it that cost our firm several dollars and didn't help our spinning any.

We had just started a new mix on trial and had a box of roving ready to set into a spinning creel for the ends-down test.

The mill owner, who actually was a "sharp" mill man too, took a look at the frame and immediately sat on his built-in panic button.

"No one," he insisted, "in his right mind would expect such a dirty frame to give fair test results."

In losing, we could only point out that the frame was giving an ends-down performance on par with the mill average, that the

ROSS Air Systems

Engineered Atmospheres for Better Processing

TUFTED CARPETING

The processing of Tufted Carpeting involves the use of air and heat...hot air and lots of it. And of most importance are the temperature control and the circulation and impingement of this air.

Faster production in all industries is very much in the picture today, and where 'drying' is a production step, High Velocity Drying is of major importance. Through research and development, Ross Engineers have kept pace with—even anticipated—demands for faster drying, leading to better production at higher speeds.

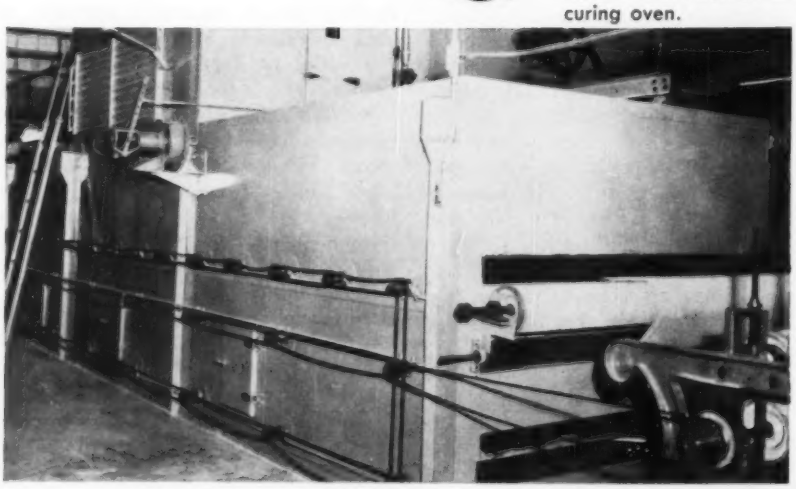
It would be a good idea to discuss preliminary plans with one of our engineers.

J.O. ROSS ENGINEERING

A Division of Midland-Ross Corporation/730 Third Ave., New York 17, New York

ATLANTA • BOSTON • DETROIT • LOS ANGELES • SEATTLE • MT. PROSPECT, ILL.

Send for a copy of our bulletin on 'High Velocity Dryers'... the type of unit that holds the answers to High Speed Latexing of Tufted Carpet.



3 pass - latex drying and curing oven.

frame would be given its scheduled cleaning on time, etc.

One might say we won half the battle for the owner relented enough to say, "All right, just clean up one side and I'll show you who's right."

You probably have guessed the rest. I stayed until the rolls were scrubbed, stands aligned, the top rolls buffed and set, etc.; then I began the long-delayed test—in which the dirty side ran rings around the clean one.

CONTRIBUTOR No. 1236

How a woolen mill solved a roving handling problem

Photo 1

UNITED STATES CHAIN & BUMPER CO. PHOTOS

■ DRAPER Brothers Co., a woolen yarn manufacturing firm in Canton, Mass., had the problem of efficiently moving spools of roving from the card room on the first floor to the spinning room on the second floor in an existing two-story structure, and returning the empty spools to the carding department.

To solve it the overhead conveyor installation shown in the accompanying photographs was installed, eliminating manual handling and the need for an elevator and hand trucks.

This installation utilizes 1300 feet of gravity or free track which is driven by 500 feet of powered conveyor track. Powered track moves at the rate of 30 fpm.

Pusher dogs, mounted directly to the chain which serves as the motivating force, automatically move the loads attached to the free carriers. These free carriers move in a track alongside the power track, and by use of switches in the free track, carriers can be automatically shunted off and onto powered lines as desired. Carriers then can travel by gravity or may be hand-pushed on the free track.

The power loop circles the first floor **(Photo 1)** to service load stations. Loaded carriers, which may weigh as much as 160 lb, rise at a 35° angle to the second level **(Photo 2)** on specially designed carriers. These carriers are spaced 30 feet on center under power.

On the second floor **(Photo 3)**, after carriers travel some 100 feet, they enter an automatic switch station actuated only by index flags on loaded carriers. Loads are routed automatically to an 80-ft gravity line, and from this point to any one of a number of free (non-powered) lines for in-process storage according to grades and colors before entering the spinning room where the yarn is spun on bobbins.

Empty carriers are returned to the first floor after being unloaded on the second. These empty carriers are powered around unloaded until needed at one of the 13 separate loading stations, each with an automatic switch. Once the carrier has been loaded, an index flag on the carrier is reset and it begins the trip to the second floor switch station.

Photo 2

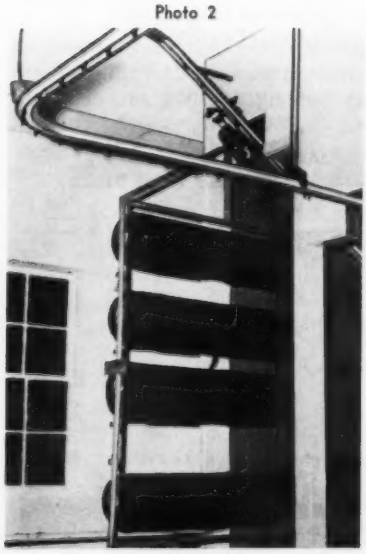
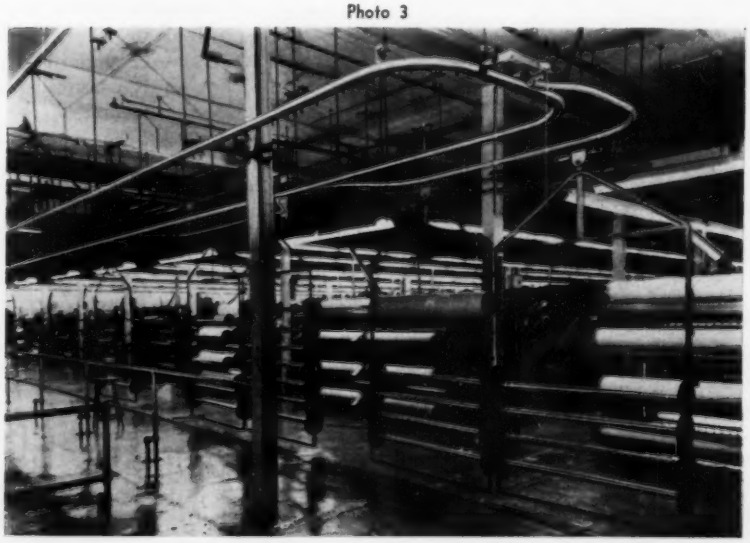
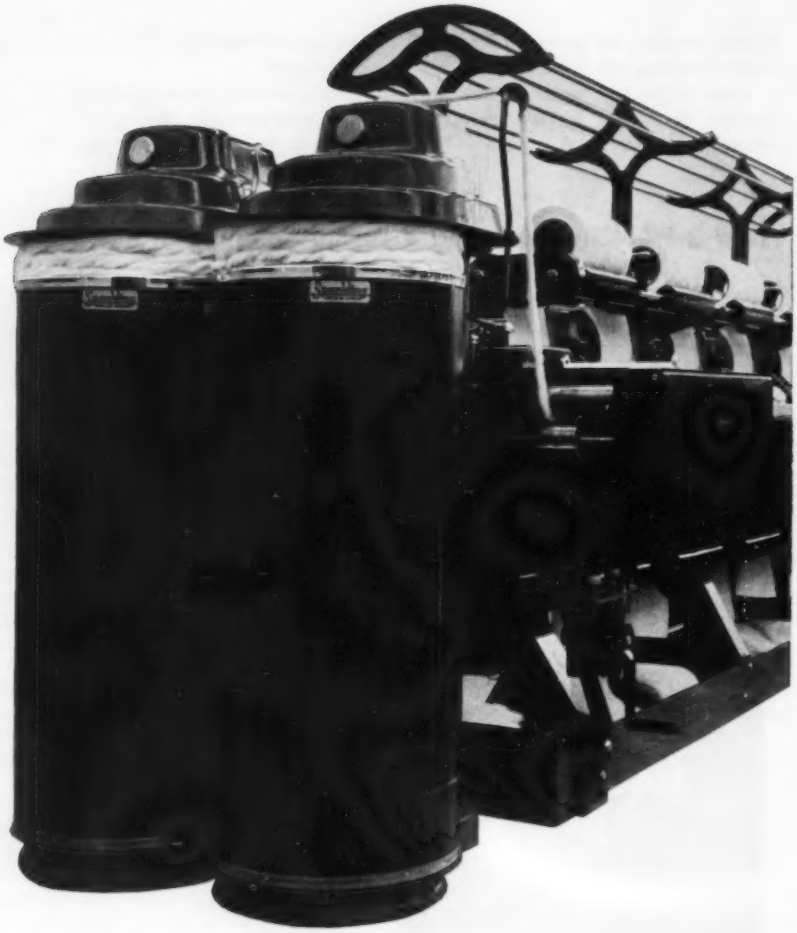


Photo 3



LONGER LIFE LESS UPKEEP



SPAULDING VULCANIZED FIBRE ROVING CANS

Rolled top, reinforced with 3/16" wire provides perfectly smooth edges, maintains roundness through years of hard use. Other top styles also available.

These are the roving cans that assure long service **without** the usual dangers of product damage.

Their Vulcanized Fibre construction, with its high impact resistance, makes burring, denting and rust impossible.

Their superior interior coating resists wear and abrasion, is unaffected by the chemicals used to set synthetic yarns.

Their insulation to static electricity prevents snarling.

For better, safer handling, choose Spaulding Vulcanized Fibre Roving Cans.

A Spaulding Textile Application

SPAULDING FIBRE COMPANY, INC.

Materials-Handling Div., Dover, New Hampshire

351 WHEELER STREET, TONAWANDA, NEW YORK

Education discussion *(from page 207)*

spect; so is a scientist. Liberal arts education is vital for any society. It is not necessarily the best education for all men and women. It is necessary to know "how" as well as "about." A good engineer is as worthy of respect as a good Greek scholar. Any technician is of greater worth than an indifferent scholar who may often be more of a poser than anything else.

Education is vital to our society. The threat of Russia, the effectiveness of Russia's specialized education, is too great for us to waste our energies in divisive arguments. The effectiveness of our education, even our national security, is endangered by groups in education attacking other groups. For some people (but certainly not all) liberal arts is most desirable. The accomplishment here should be on the highest possible plane. For others, specialized education is most valuable, and it deserves more than contempt from generalists and humanists. In education, the general or the special should not be regarded as higher or lower types of education but as different types for differing human beings, all of whom should learn through education to treat each other with increased mutual respect.

IN OUR COLLEGE, as stated in the beginning of this article, we surveyed industry for the opinions of management as to the type of person most desired by industry, the type of educational program most favored. Without American industry, so often satirized by writers, all books would be handwritten manuscripts and the authors' monetary return would be insignificant. Many scholars, however, might be horrified by even the thought of such a survey. Why should they be? Every educational program evolved to meet society's needs. The chief aim once was the development of the clergy. Earlier it was to develop the perfect contemplative man from leisure groups based on a slave society. Neither of these goals suffices today. To confine education to such goals would be a national disaster. Many of the letters we received showed careful thought. Education has always been established by groups to meet their needs. The voice of industry on education deserves a hearing.

One executive said, "The demands upon people are such that both general and special backgrounds are needed." The tenor of the writer was that such could be provided in a single educational program at the college level. Another said, "The technical instruction must be more in breadth than depth. Our graduates today and in the future must know the entire industry from raw materials to merchandising."

Our college is somewhat specialized. We have close relationships, historically, with the textile industry. In one response to our request, a group of textile executives joined together to produce the seven objectives listed below for textile colleges:

1—To promote higher standards of secondary education so that the high school graduate will be better prepared for college work.

2—To raise entrance requirements, having high schools and junior colleges teach more of the subjects that are now part of the college curriculum.

3—To build in the minds of high school students, parents, and the public a better understanding of, and appreciation for, the textile industry.

4—To raise starting salaries of faculty members and administrators to attract well-qualified people.

5—To have a schedule of salary increases that will hold the teaching and administrative staff and that will be equal to or greater than what industry will pay men for work requiring equal education and experience.

6—To broaden curricula with such courses as those suggested in answer to question No. 1 (this listed attitudes, skills, and knowledge thought desirable beyond assumed science, mathematics, and engineering).

7—To further dignify and professionalize textile college education.

MANY OF THOSE who replied named "attitudes" as of equal importance with knowledge and "skills." This is sensible, since improper attitudes can result in nullification of knowledge or skills wherever group response is essential, as it almost always is.

Creative thinking, of course, is in everyone's list of objectives for education. Another universal favorite is keeping the will to learn throughout life. What stimulates, encourages, develops creative thinking? What causes a man to stop thinking and subside into a routine? The questions are complex, and no answers are complete ones. Certainly the opportunity to think creatively must be open. There must be activities in schools and colleges where each individual may develop self confidence. Condemnation must not attend the first mistake a person makes. However, it must also be recognized that repetition of the same mistake can be disastrous and that mistakes bring their own punishment.

One top industry official who has been interested in education over many years commented as follows:

"I recommend intensive instruction in the following broad areas:

"1—Basic sciences which underlie the textile industry, such as chemistry, physics, and applied mechanics.

"2—The arts of both verbal and oral communications. Skills in these areas are sadly lacking in the majority of graduates from our textile schools.

"3—Understanding and some competence in the tools which modern management uses in directing the activities of their organizations, including accounting, cost accounting, personnel management, research and development, operations research, marketing, and merchandising.

"4—Basic understanding of the principles of our economic system and of the human behavorial aspects which underlie this system.

"5—Broad understanding of the principles underlying the manu-

Continued on page 302

REWARD

You've always wanted a water-repellent that would give you *more* performance for your money and, at the same time, achieve a higher standard of quality water-repellent finishing *plus* the long sought-after characteristic: *Controlled Hand*. Here it is . . . New Impregnole FH, the finish that will do all this and more. Remember, too, more performance means *more profit to you.*

Please call or write your Warwick Chemical Representative today for further details.

Impregnole FH gives you *Controlled Hand* plus these advantages:

- Used at low concentrations giving excellent money-value performance.
- Produces outstanding water repellency, durable to laundering, which is not possible with other non-durable water repellents.
- Develops a soft, desirable hand and thus may be used as a combination softener/water repellent combination to upgrade wash and wear finishes.
- Spot and stain resistance, durable to both dry cleaning and laundering.
- No curing and no afterwash required.
- Applicable to every fiber, thereby permitting minimum inventory.
- Readily dispersed in water at room temperature.
- Extremely versatile: it may be applied by itself and with most thermosetting resins, polyvinyl acetate, polyvinyl alcohol and starches while maintaining a high degree of water repellency.

Warwick Chemical Division

SUN CHEMICAL CORPORATION

750 Third Ave. at 46th St., New York, N. Y. • YUkon 6-5500

PLANTS AND LABORATORIES: Wood River Junction, R. I., Telephone Carolina 4-7781 • Rock Hill, S. C., Telephone Rock Hill 2036

® WARWICK CHEM. DIV., SUN CHEM. CORP.

SEE THIS AT THE ATMA SHOW! ATLANTIC CITY—MAY 23-27 BOOTHS 478-81

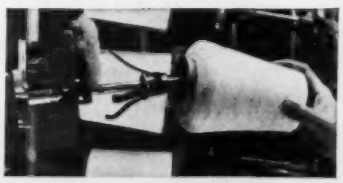
A KIDDE CREEL can handle any package...

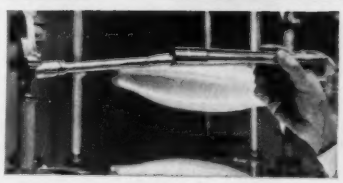
present-day or future development!

Talk about versatility! Kidde creels are designed to handle any package—any size, any shape—simply by using adapters like those in the pictures at right. Clamp type construction makes it easy to change vertical or horizontal spacing to accommodate different sizes and shapes. And Kidde will design holders and adapters for present creels to take any future packages developed!

Kidde works with you to build the creel your operation requires—horizontal or vertical, magazine or non-magazine—any size from 40 to 4,000 running ends. And Kidde tension devices can handle the entire range of yarns—natural or synthetic, filament or spun.

Why not send for our booklet describing all the advantages of Kidde creels. Just write or phone.





TRICOT AND RASCHEL MACHINES • TRICOT WARPERS • HORIZONTAL WARPERS • BEAMERS
CREELS • SLASHERS • WINDER-REDRAWS • TENSOMETERS • TENSION COMPENSATORS

Kidde TEXTILE MACHINERY CORPORATION — BLOOMFIELD, NEW JERSEY

The word KIDDE is the trademark of Walter Kidde & Company, Inc., and its affiliated companies.

• • • SEND FOR THIS NEW FREE BULLETIN OF PRODUCTION-BOOSTING FACTS

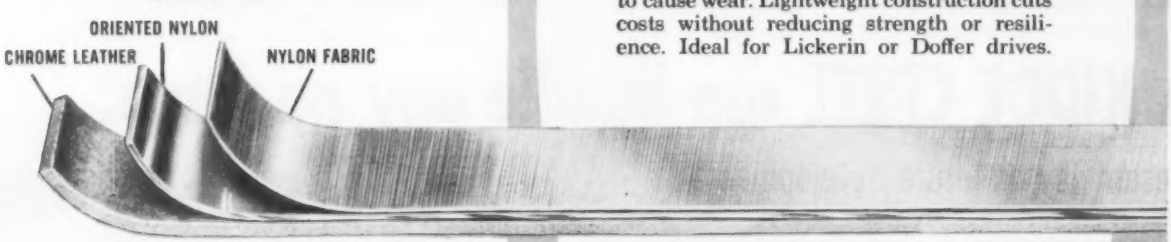
The *improved* belt
furnished endless
for the textile industry

Get this new G&K Bulletin and learn how the "integrated Nylon" construction of G&K endless NYCOR TEXBELT provides:

- Optimum effective tension on fixed center drives.
- High coefficient of friction and freedom from stretch and slip.
- Stretchless — which eliminates take-ups.
- Shock load absorbing capacity that prevents damage to belt or machinery.

MADE IN UNITED STATES

Furnished endless. No mechanical fasteners to cause wear. Lightweight construction cuts costs without reducing strength or resilience. Ideal for Lickerin or Doffer drives.



GET FULL DETAILS IN FREE BULLETIN FROM YOUR NEAREST G & K DISTRIBUTOR

Columbus Plumbing Heating & Mill Supply Co.
1226—10th Avenue, Columbus, Georgia

The Young & Vann Supply Co.
1731 First Avenue North, Birmingham 2, Alabama

Pye-Barker Supply Co. 231 Pryor St., S.W., Atlanta 3, Georgia

Battery Machinery Co. 102 North Second St., Rome, Georgia

Berry Equipment Co.
P.O. Box 3055, Station A, 29 Pendleton St., Greenville, S.C.

Dixie Supply Co. P.O. Box 784, Anderson, South Carolina

Industrial & Textile Supply Co.
P.O. Box 1249, 1300 S. Mint Street, Charlotte, North Carolina

Barker-Jennings Corp. 1000 Commerce St., Lynchburg, Virginia

Turner Supply Co. P.O. Box 1429, 250 N. Royal St., Mobile, Ala.

Graton & Knight, Southern Representatives
Wiley M. Wills, Columbus, Georgia
G. L. Bryson, Jr., Charlotte 9, North Carolina

GRATON & KNIGHT CO.

World's Largest Manufacturer of Industrial Leather Products

Worcester 4, Mass. • Camden 3, N. J.

(A division of L. H. Shingle Company)

NEW PRODUCT PARADE

Please note: Claims made in all of these announcements of new developments are of necessity based upon information furnished by the respective suppliers.—The Editors.

Narrow fabric dye machine nonsnagging

A skein dyeing machine for zipper tapes and other narrow fabrics is of all stainless steel construction and has a false back and an indirect heating coil to eliminate snagging of loose tape ends. Both natural and man-made fibers are readily handled in the machine which is manufactured in capacities ranging from 100 to 500 lb.

Skeins are suspended in a relaxed condition between stainless steel dyesticks. Separate dye and chemical feed system utilizing proven principles are used; instrumentation can be provided to control bath temperatures; and front doors are normally air operated but can be made to suit customer's requirements.

Klauder Weldon Giles Machine Co., Adams Avenue & Leiper St., Philadelphia 24, Pa.

Do you want more data? Write ◂ or use card on page 281; list E-101

Versatile tenter dries quickly and uniformly

The "Proctor Universal Tenter" is an exceptionally versatile machine—it drys, cures, or heat sets all knitted or woven fabrics of natural or synthetic fibers and natural-synthetic blends. Because of its improved air circulation and distribution, drying is more uniform, capacity is greater, and the housing is lower and more compact.

Another exclusive feature is an all-new pin, clip or combination pin-clip tenter chain which handles and guides all fabrics at high speeds with gentle care. Clips are attached to the chain with but one screw, and may be removed without disturbing chain tension. The chain features long-wearing, self-lubricating bronze shoes which ride on cast iron rails.

Proctor & Schwartz, Inc., 7th St. & Tabor Rd., Philadelphia 20, Pa.

Do you want more data? Write ◂ or use card on page 281; list E-102

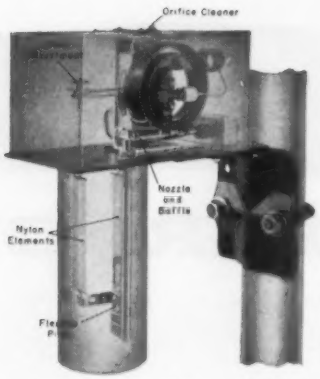
How to cut filling supply costs, boost quality

The Schlafhorst Servoloom Autocopser is a high speed, fully automatic quill winder designed for use in mills with looms equipped with the Draper Automatic Filling Magazine which eliminates the manual task of plugging batteries. This new quiller is the conventional Schlafhorst Autocopser equipped with a fully automatic loading device to feed full bobbins of yarn into receptacles for the Draper Automatic Filling Magazine.

Advantages of providing filling to looms by the combination Servoloom Autocopser and Draper Automatic Filling Magazine method are twofold: (1) production cost per pound of fabric is much lower; (2) quality of fabrics is improved.

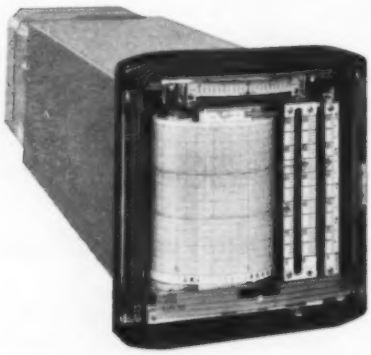
Since one spindle of the winder (operating at from 11,000 to 12,000 rpm) produces enough filling to supply an average of three looms, few quiller tenders and little indirect labor are required to operate an installation of

Taylor

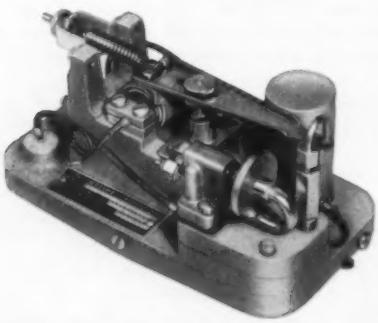


Phantom View of Room Model

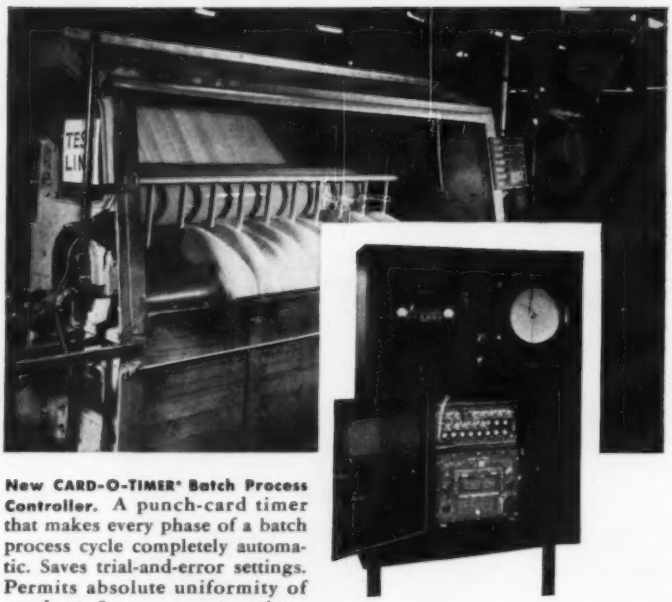
No. 207T Relative Humidity Transmitter. A non-indicating, pneumatic, motion-balance transmitter. Permits direct reading in receiving instrument. Simple, dependable, good repeatability. 3-15 psi output signal. **Bulletin 98338.**



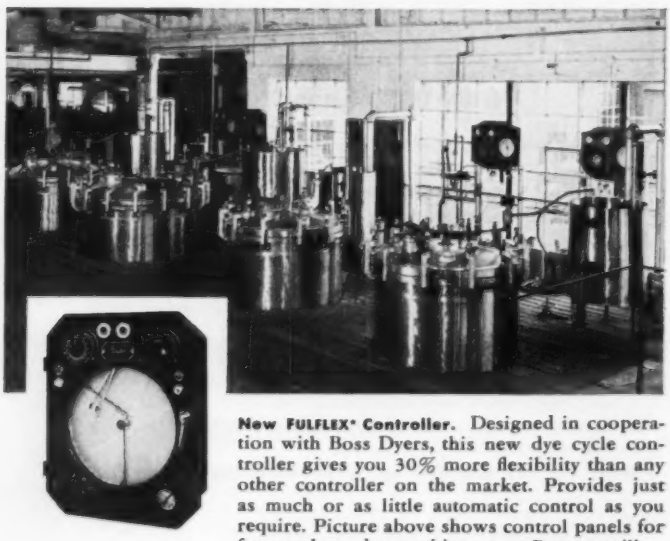
No. 90J TRANSCOPE® Pneumatic Recorder. The finest operator's tool yet developed for modern miniature-instrument panels. No other recorder puts so many features in so little panel space. Receives 1, 2 or 3 3-15 psi signals. **Bulletin 98286.**



SENSAIRE® Pneumatic Temperature Transmitter. For limits of minus 30°F. to plus 1200°F. Range spans, 50°, 100°, 200°, and 400°F. Sturdy, compact, force-balance, mercury-filled system, temperature compensated. 3-15 psi output signal. **Bulletin 98293.**



New CARD-O-TIMER® Batch Process Controller. A punch-card timer that makes every phase of a batch process cycle completely automatic. Saves trial-and-error settings. Permits absolute uniformity of product. Saves operator time. Shown here on a Dolly Washer application at a well-known Southern mill.



New FULFLEX® Controller. Designed in cooperation with Boss Dyers, this new dye cycle controller gives you 30% more flexibility than any other controller on the market. Provides just as much or as little automatic control as you require. Picture above shows control panels for four package dye machines at an Eastern mill.

Taylor Instruments

Quality Controls

. . . YOUR INVESTMENT IN THE FUTURE!

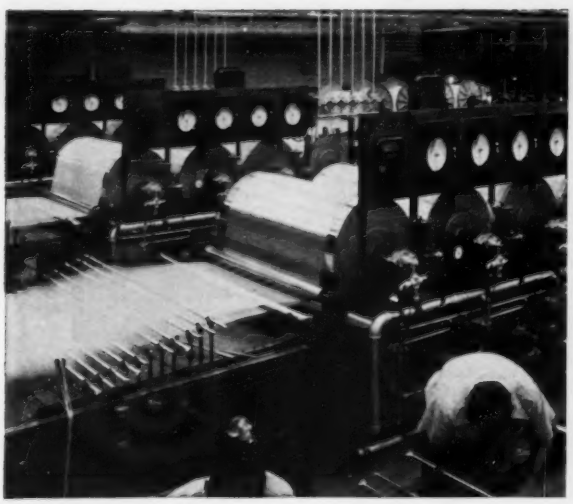
If you're in the market for instrumentation, or are likely to be in the forseeable future, come visit the Taylor booth at the ATMA Show. You'll see all of the instruments shown here, and many more . . . all designed to help you maintain quality and reduce costs.

Taylor has been building a reputation for dependable, accurate control systems for the Textile Industry since 1919. Equally important to you, Taylor instruments are designed to last. The famous FULSCOPE* line, for 20 years the standard of accuracy, is a fine example of the obsolescence-free reliability that is an inherent feature of Taylor instrumentation.

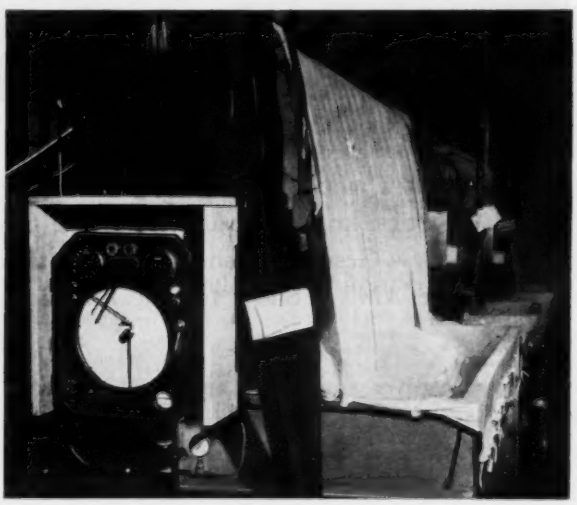
* * *

If you can not visit the show, ask your Taylor Field Engineer about these instruments or systems. Or write Taylor Instrument Companies, Rochester, New York, or Toronto, Ontario.

SEE US AT THE ATMA SHOW—BOOTHS 635-637



Taylor Control System for high speed slashing increases weave room efficiency.



FULFLEX* Controller helps a North Eastern mill produce top quality piece dyeing.

*Trade-Mark

MEAN ACCURACY FIRST

THE FRANKLIN SHEAR-

- with new accuracy
- new uniformity
- new smoothness

Put a whole new face on woolens, worsteds, synthetics, knitgoods and high pile fabrics with this new Gessner finishing machine, to be shown at the AMTA Show for the first time.

Revolver and knife, anchored to the main frame, reduce vibration and chatter, to produce a remarkably accurate and even cut — every inch of it uniform and smooth. By all means, see this new shear, at Booth 246.

DAVID GESSNER CO.

WORCESTER, MASS.

Southern Representative:
Richard A. Herard,
222 Piedmont Bldg., Greensboro, N. C.

Western Representative:
E. G. Paules & Co.,
1762 West Vernon Ave., Los Angeles, California

Canadian Representative:
W. J. Westaway,
Montreal, Quebec; Hamilton, Ontario

For further information use Handy Return Card, Page 281

the machines. Because there are fewer filling breaks at the loom and the transfer mechanism is so simple, weavers' and loom fixers' assignments may be increased.

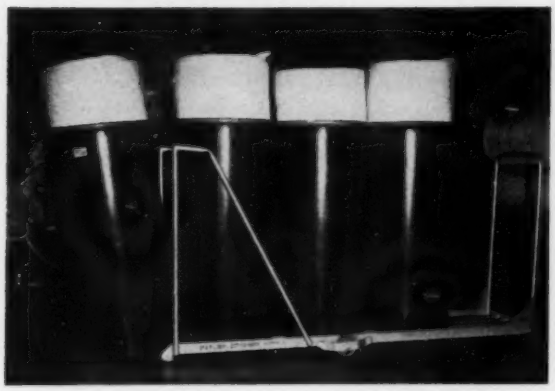
The precision wound bobbins produced on this machine have a tip bunch which is required for the Draper magazine. The tip bunch can be adjusted separately on each spindle, depending upon its desired length, location, and firmness. Finished bobbins are then loaded into the compartments of the magazine by a simple and foolproof device which works as an independent unit attached to each winding head. Therefore, different yarns and counts can be quilled on each spindle.

At the loom, bobbins are removed from the magazine in the same order as they are wound from the supply package, thus minimizing the possibility of making filling bands in fabrics. Since filling is untouched and bobbins are kept in separate compartments, soiling and damaging of filling are prevented.

The Terrell Machine Co., P. O. Box 928, Charlotte 1, N. C.

Do you want more data? Write ◂ or use card on page 281; list E-103

Trucks for 16" or larger card cans



A card sliver can carrying truck—basically designed and patented by Harriet & Henderson Cotton Mills, Inc. —is made of light piping, has one swivel wheel in the rear, two nonswivel wheels in the center, and a conveyor roll in the front to facilitate easier loading and unloading of the heavy cans. The over-all height of the deck is approximately 2½", and the trucks are made for 16" and larger cans.

Fisher Manufacturing Co., Inc., Box 350, Hartwell, Ga.

Do you want more data? Write ◂ or use card on page 281; list E-104

Electromagnetic drives feature economy

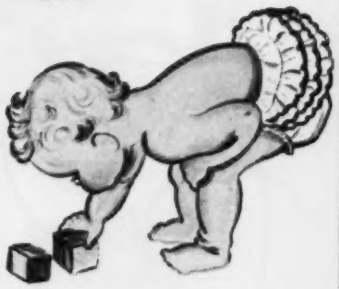
A series of economical adjustable-speed, a-c drives—called Magnaflow—are of integral-unit construction and are rated ¼ to 100 hp.

The electromagnetic drive is designed for powering conveyors, fans, pumps—practically anywhere speed control is needed. Controls are compact: about 9" x 8" x 24" for air-cooled drives up to 30 hp.

The drive can be set before or during operation to deliver any desired speed within its range. Not only can the speed be adjusted quickly and easily, but it remains adjusted. A built-in tachometer monitors the output speed and automatically corrects it, regardless of any change in

Moropol 762

the non-soil retentive durable non-ionic resin softener



Moropol 762 increases tear strength and abrasion resistance, and adds to the crease angle in resin treated fabrics. These properties are durable for the life of the fabric.

The "hand" imparted by Moropol 762 as a resin softener is silkier than with other durable softeners, and is excellent for fabrics like women's apparel. It does not contribute to the pickup of soil and will not retain soil or dirt during laundering, as do many thermoplastic resin softeners. This feature recommends its use on white goods in preference to acrylate, silicone, and polyethylene softeners.

General Properties

Chemical Nature:	An aqueous non-ionic dispersion of an epoxy type plasticizer.
Appearance:	Creamy white emulsion
Concentration:	40%
pH:	6.0 - 6.5
Compatability:	Compatible with water phase resin solutions as well as cationic, acid, alkaline, and metal salt additives.
Stability:	Freeze-thaw and storage stable for over 6 months.
Shipped:	In 55 gal. drum containers . . . exact net wt. 440 lbs.

Let us send you technical data on Moropol 762

MORETEX *Chemical Products,* INC.

314 W. Henry St., Spartanburg, S.C.

Established 1908 Manufacturing Chemists

CALL

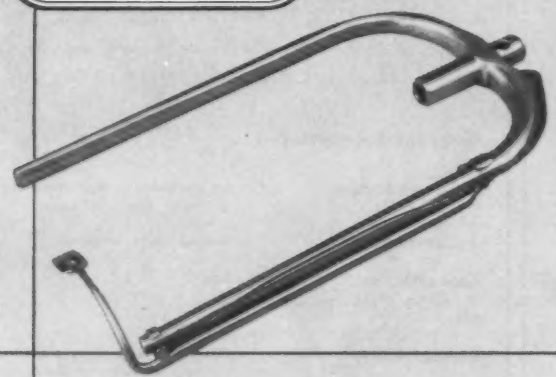
Watson & Desmond

FOR . . .

- Shuttles ..... Watson-Williams Mfg. Co.
- Anti-Friction Top Rolls & Ny-Pre-Lon Cradles for Spinning and Roving ..... Progressive Engineering Co.
- Paper Spinning Tubes & Quills ..... Textube Corporation
- SKF Roller Bearing Spindles ..... Zinser
- Maier Prima Flyers ..... Eugen Maier
- Spinning & Twister Rings ..... Reiners & Fuerst
- Wood Spools & Bobbins & Cones ..... Vermont Spool & Bobbin Co.
- Fibre Head Spools & Bobbins ..... H&P Spool Bobbin Co.
- Plastic Quills & Bobbins ..... Vulcanized Rubber & Plastic Co.
- Shuttle Fur ..... R. M. Taylor Co.
- Humidifiers ..... Walton Laboratories, Inc.
- Dye Tubes & Headless Shipping Packages ..... New England Paper Tube Co.
- Dubo Spindle Lock Washers ..... G. Dikkers
- Yarn Inspection Machines ..... Ernest Toenniessen
- Used Machinery
- Mill Properties & Appraisals

MAIER-FLÜGEL

Maier Prima Flyers...



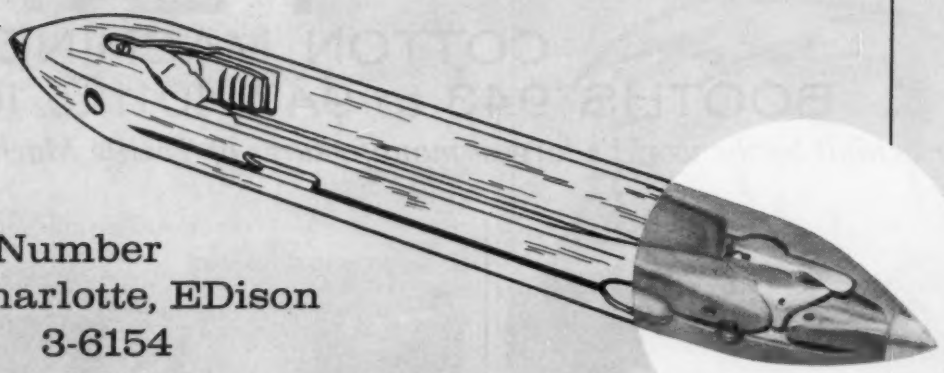
The heavy shoulder construction of Maier Prima Flyers allows maximum extension in width and height. High polish, especially in throat and hollow leg prevents "eyebrowing" and insures high quality roving. Notched throat puts false twist into roving. Drop presser is designed for gently-angled roving (as it leaves hollow leg) to prevent breaking away of fibers . . . dynamically balanced at maximum speed within ± 1.1 gram tolerance. RHCM, chrome-matte finish. Location of slot in eye of presser finger makes threading almost automatic.

R+F

Nitrided Spinning & Twister Rings...

Spinning Rings: Reversible and non-reversible, 8 and 10 mm. curved and straight webb . . . Twister Rings: Reversible and plain. Nitrided rings insure surface hardness of 67 to 69° C. Rockwell . . . practically corrosion-free. Accurate profile, mirror-like finish for longer life, fewer ends down, increased spinning and twisting production, improved yarn quality . . . . . Specify R&F Nitrided Rings.

THERE IS NO RING AS GOOD AS A NITRIDED RING.



The Number is: Charlotte, EDison 3-6154

OR CALL THE FOLLOWING WATSON & DESMOND REPRESENTATIVES

IN CHARLOTTE:
Edgar E. Ball
Marshall Gayle
EDison 3-6154

IN GASTONIA:
Richard D. McPhail
Box 1174
UNiversity 5-8631

IN GREENSBORO:
John Wyatt
Ralph Patton
Box 701
BRoadway 3-3012

IN WEST POINT, GA.:
H. Dorsey Lanier
Box 421
Phone 64-23363

IN GREENVILLE, S. C.:
Ray A. Norman
Box 779
CEdar 9-4279

Zinser

TEXTILE SUPPLIES W D USED MACHINERY

High Speed Twister Spindles...

Because of the higher speeds and larger packages possible with Zinser Spindles mills have increased production as much as 20%. More than 40 million Zinser Spindles are in operation all over the world. Long life, easy maintenance, simple to lubricate, and smooth running at high speeds. Sized for bobbin weights from 1-3/4 ounces up to 12 pounds; for speeds up to 18,000 RPM.

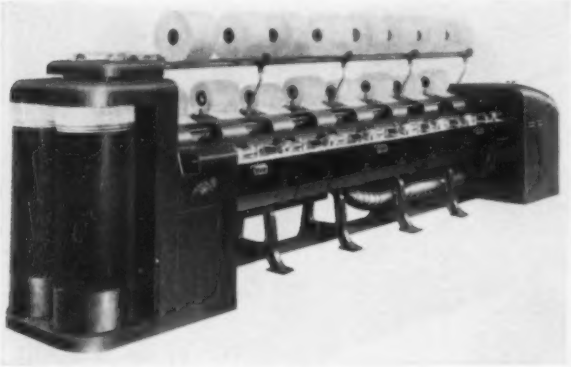
Watson & Desmond

P. O. BOX 1954 • CHARLOTTE, NORTH CAROLINA

COME SEE US IN ATLANTIC CITY...
BOOTHS 672-5

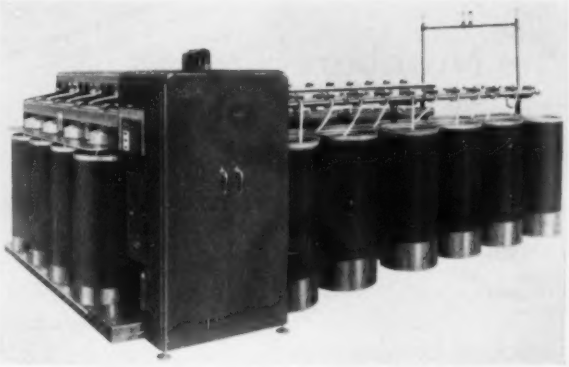
PLATT
COTTON MACHINERY
BOOTHS 943 to 947, 1011 to 1015

A major exhibit by the world's largest manufacturer of Textile Machinery



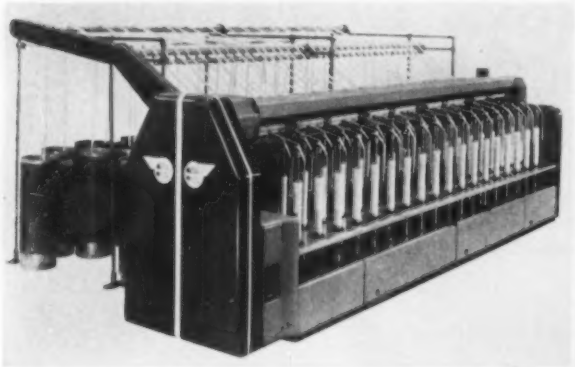
HARTFORD 8 COMBER

The Hartford 8 High Production Comber is reasonable in price and simple in operation. It has the greatest production per head and per unit of floor space ever achieved and is eminently suitable for all classes of work from super-combing through to upgrading.



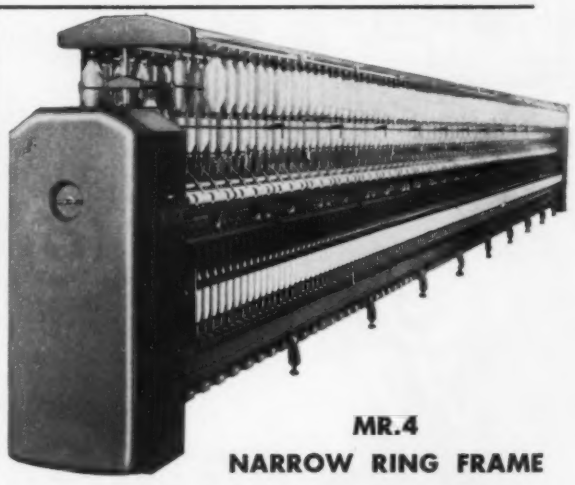
MDF.5 HIGH SPEED DRAW FRAME

Platts' MDF.5 High Speed Draw Frame is modern and efficient in every respect, occupying minimum floor space. The machine is outstanding for high productions, excellent sliver regularity, ease of operation and reduced maintenance.



MS.3 SPEED FRAME

This modern, high efficiency MS.3 Speed Frame is a slubber, producing 14" x 7" bobbins containing up to 100 ounces of roving with high tension winding.



MR.4
NARROW RING FRAME

The new Platt MR.4 Narrow Ring Spinning Frame is an all count, general purpose, high efficiency machine with considerable inherent flexibility and excellent performance. It is easy to operate and maintain.

EXCLUSIVE WITH

ATKINSON, HASERICK & CO., INC.
SALES · SERVICE · PARTS IN U.S.A.
FRAMINGHAM, MASS.
55 Sabin St., Pawtucket, R.I.
Insurance Building, Greenville, S.C.

PLATT BROS. (SALES) LTD.
OLDHAM, ENGLAND
MARKETING THE TEXTILE MACHINERY MADE IN THE WORKS OF PLATT BROTHERS & CO. LTD. DOBSON & BARLOW LTD. HOWARD & BULLOUGH LTD.

load. Because of the extremely small excitation requirements, the drives are adaptable to either electronic or magnetic amplifier control.

Westinghouse Electric Corp., P. O. Box 2099, Pittsburgh 30, Pa.

Do you want more data? Write ◂ or use card on page 281; list E-105

25" worsted spinning frame

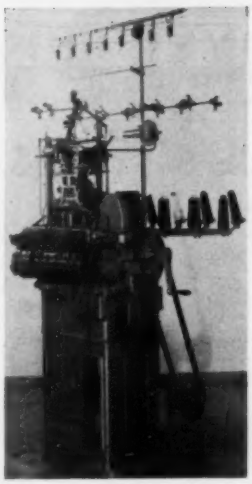
A 25-inch narrow spinning frame for the low-cost production of worsted and long-fiber yarns provides a 25 per cent increase in production speeds, improvement in yarn evenness, a substantial increase in package size, and improved running.

The Arrow WM-1 is an all-ball-bearing unit suited for spinning pure worsteds, pure synthetics, and blends and has been thoroughly "evaluated" on those fibers in counts ranging from 15s to 80s. Design simplicity and the frame's versatility qualify it for production assignments "not normally available for worsted frames."

Roberts Company, Sanford, N. C.

Do you want more data? Write ◂ or use card on page 281; list E-106

Knitter produces a great variety of hose



Patterning possibilities of the Model JU-3 Jacquard-rib-links circular hosiery knitting machine made by Gottleib Eppinger and Co., of Denkendorf Eslingen in West Germany — include two-and three-color Jacquard in 1:1 and other rib constructions. It also can be set up on links patterns, and two-color floating on L & L, as well as combined with Jacquard in two and three colors. Stripers up to five colors are also part of the machine's equipment.

Its normal equipment includes three Jacquard devices allowing a pattern height of 48 racks and width of 25 needles, or 50 needles with a V-layout. Equipment further includes a three-feeder attachment, draw-thread device, heel winding-down, central lubrication, electric stop motion devices, electromagnetic needle detectors, chain economizer, graduated stiffening, rubber feeding device, and individual motor drive. Pattern drums can be switched in five minutes.

Southern Mill Equipment Corp., 508 West 5th St., Charlotte, N. C.

Do you want more data? Write ◂ or use card on page 281; list E-107

Detects bubbles in liquid or foam

The Ultrasonic Bubble Detector can be used to detect undesirable or controlled bubbling in almost any liquid, in open or closed vessels, pipes, or flumes, whether the liquid is static or flowing. It can be coupled with any

LOOK, MA...

LESS PIN TRASH, LESS PEPPER TRASH, LESS OVERALL WASTE, STRONGER & CLEANER YARN!!

The Cen-Tennial Opening Unit, comprised of the Cen-Tennial Aerator, Opener-Cleaner, Separator and the Cen-Tri-Vac, guarantees removal of more pepper and pin trash without the evils of licker-in and beater-type openers. No good cotton is lost in the opening and cleaning processes, therefore money is saved.

The Cen-Tennial Opening Unit prevents damage to stock which has already been "suitably licker-ined" at the gin.

This system has been proved in years of testing under strict processing conditions. Take the first step toward saving money for your mill by writing for further details today!

OPENS—CLEANS—BLENDS

CEN-TENNIAL HAS BEEN MILL-CONDITIONING COTTON FOR MORE THAN 75 YEARS

"FROM FIELD TO FABRIC"

CEN-TENNIAL

COTTON GIN COMPANY
COLUMBUS, GEORGIA

"H-W"® conditioner

The best way to assure plus value and quality

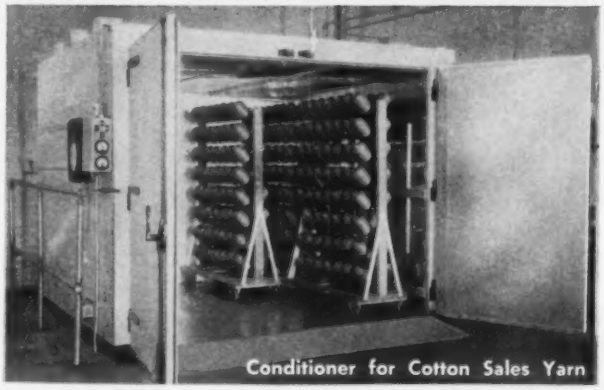
in YARN CONDITIONING

ATMA

American Textile Machinery Exhibition - International

ATLANTIC CITY, U.S.A.
MAY 23-27, 1960

DON'T MISS OUR EXHIBIT AT BOOTHS 680 and 681



Conditioner for Cotton Sales Yarn

THE INDUSTRIAL DRYER CORPORATION

STAMFORD, CONNECTICUT • SALES REPRESENTATIVES IN KEY TEXTILE AREAS

DID YOU KNOW WE SERVICE 5 STATES?

Virginia, North & South Carolina, Georgia & Tennessee

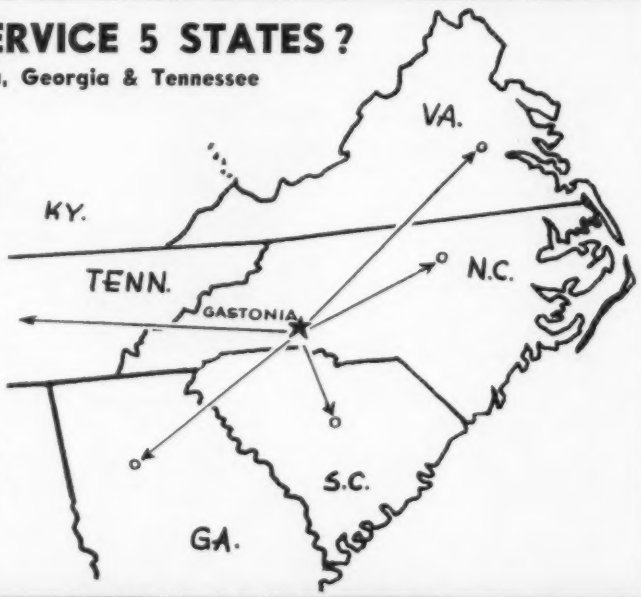
JENKINS Metal Shops trucks roll into these five states every week on scheduled runs to service their good clients with prompt and personal service.

Wouldn't you like to be included on the scheduled run through your state? You can . . . just drop us a line. We will pick-up and deliver and assist you in many ways.

We have representatives in New England and other Textile centers . . . also in Canada.

Our trained personnel will gladly explain our services and facilities. JENKINS Metal Products are numerous and are quality proven by years of service.

IN OUR 48th YEAR OF SERVICE



SINCE 1912
JENKINS METAL SHOPS
INCORPORATED
ENGINEERED PRODUCTS

JENKINS METAL SHOPS, Inc.

P. O. BOX 1160
GASTONIA, NORTH CAROLINA

type of indicating, recording, or controlling instrumentation, or simply with some type of alarm—whether the bubbles are in the liquid or the resultant surface foam is irrelevant.

The sensing head assembly, located at the process, is cable-connected in a continuous loop with the amplifier unit, which may be remotely located. A pulsed ultrasonic signal passes through the liquid which is likewise flowing between the transmitter and receiver heads. The presence of bubbles naturally weakens or interrupts the signal.

Taylor Instrument Cos., 95 Ames St., Rochester 1, N. Y.

Do you want more data? Write ◂ or use card on page 281; list E-108

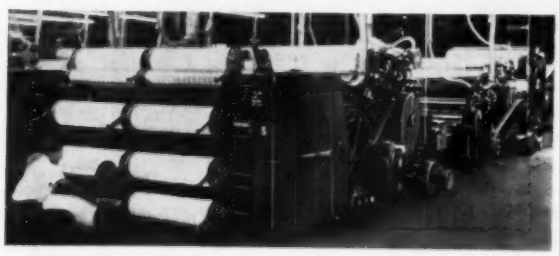
Reduces strong formaldehyde vapors

An improved product (Formol 11-X) recommended for the abatement and control of airborne fumes from textile finishing operations using ureaformaldehyde resins is unique in its properties of reducing the intensity of strong formaldehyde vapors by providing abatement through chemical change. The recommended application is to spray (as finely as possible) a 1- to 1½-per-cent water dilution directly into the fume exhaust duct system or process area.

Rhodia, Inc., 60 East 56th St., New York, N. Y.

Do you want more data? Write ◂ or use card on page 281; list E-109

Wool card requires 30% less maintenance



The Model M wool card is built in 60", 72", and 84" widths and requires up to 30 per cent less maintenance and power consumption than did its predecessors. Wherever practical, antifriction bearings are used, and roving quality is improved from the start from the elimination of lubricants on any card surface and plain bearings.

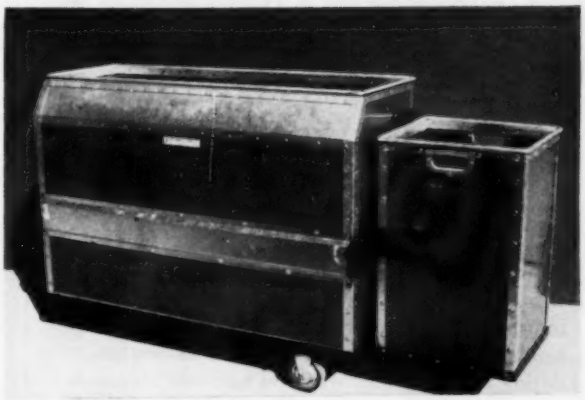
All rolls and cylinders are mounted on hardened and ground shafts, and V-belts are used on: breast, intermediate feed table; fancy roll, doffer, and strippers. Accurate speed adjustments are made with P.I.V. drive with the card running. These drives can be applied on the feed rolls in the breast section and on the finisher doffer and condenser.

Available in single cylinder, two cylinder, three cylinder, and four cylinder card sets. The 3-cylinder set includes: automatic feed, metallic breast, first breaker carding cylinder, conveyor and intermediate feed, second breaker carding cylinder, angle stripper, finisher carding cylinder, and tape condenser or delivery section.

Stripper stands are bolted and pinned to fixed positions on the face of the arch; strippers are adjustable both horizontally and vertically to the breast cylinder. Except for the feed rolls, all breast rolls are surface

no need to step in this tray unit for compression!!

dual position lockdown device eliminates troublesome procedure



ANOTHER FIRST BY FISHER!

This efficient slope side warp doff unit with detachable empty bobbin tray unit is now in service in approximately 35 mills, cutting cost at spooler winder and Roto-Coner.

It features a dual position lockdown device, eliminating the need for a man to step into the box for compression, increasing safety and efficiency features.

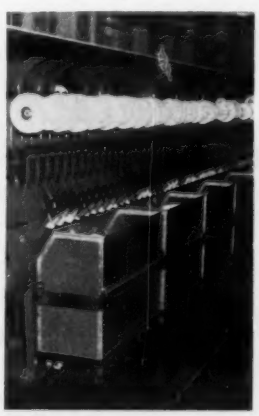
Fisher engineers are paid to THINK and this means improved materials handling for you. If you have a particular problem, let us know about it.

Patents Pending

FISHER

MANUFACTURING COMPANY, INC.

HARTWELL, GA.



Accurate textile measurement is what your customers expect. Give it to them ! Show them indisputable evidence with a "TRUMETER" printed ticket or mill tag, delivered at any point during the run. This way you not only eliminate short-measure complaints and illegible hand-written records—you cut out waste *completely*. And that means EXTRA PROFITS !

"Trumeter" Standard Measuring Machine

"TRUMETER can be fixed to most Inspection, Plaiting, Winding, Rolling and Doubling machines. Models are available for all types and widths of material —fine nylon, woollens, worsteds—even carpets, plastics, etc. It adds one way—subtracts the other and delivers its printed ticket with one depression of a lever. "TRUMETER" is always accurate—always reliable. There's one for *your* need. Write now for particulars of complete line.

"TRUMETER"

MECHANICAL COUNTERS
for most industrial needs.

- *MEASURING*
- *REVOLUTION*
- *PRE-DETERMINED*
- *STROKE*

Write for details of full line to:

TRUMETER COMPANY

38 West 32nd St. New York 1, N. Y.
IN CANADA:
W. J. Westaway Co., Ltd., Montreal-Toronto-Hamilton
See Us In Atlantic City, Booth No. 714

ANNOUNCING CARDING CLEANER FOR YOUR PICKER

SRRL Carding Cleaner Removes 50% of trash with Minimum Plucking. . . Fewer Card Strips . . . Uniform Laps . . at Full Picker Production.

Inspect the Carding Cleaner in operation at Carolina Machinery Company, Inc. at 5019 Wilkinson Boulevard in Charlotte, North Carolina.

Write P. O. Box 1922, Charlotte 1, North Carolina or call EXpress 9-1241.

CAROLINA

MACHINERY CO., INC.

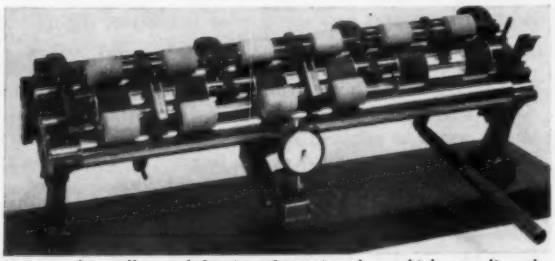
Office — 5019 Wilkinson Blvd.
Mailing Address — Box 1922
Charlotte 1, N. C.

wound with metallic wire. Cylinders are of 60" diameters; doffers of 36", 40", or 50".

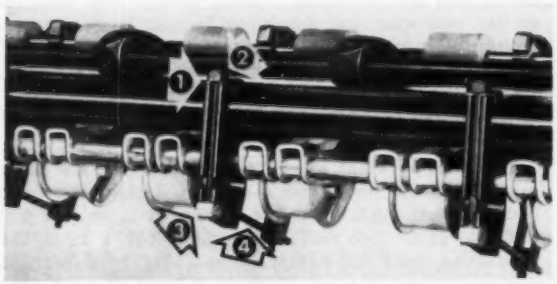
Whitin Machine Works, Whitinsville, Mass.

Do you want more data? Write ☁ or use card on page 281; list E-110

Accurate, foolproof top roll weighting



Note under rolls at left tip of tension bar which supplies the pressure. In center is the Tension Meter used for reading roll pressure. Lever at right is special tool for weighting and unweighting rolls; since this is required, unauthorized persons cannot tamper with settings.



Rear view of rolls with "Tension Weighting." Numbered arrows point to: (1) setting indicator; (2) adjusting bolt; (3) hinge; (4) tension bar.

A new method of applying pressure to the top rolls of spinning frames, known as "Tension Weighting," offers the following advantages:

1. A 100-lb pressure range, starting from any maximum pressure specified;
2. Change in pressure is simple, accurate, and easy to accomplish;
3. Pressure settings are permanent and tamper-proof;
4. Using the Tension Meter provided, accurate and sensitive measurements of pressure can be made within 60 seconds;
5. Roller beam is completely clear, allowing for full efficiency of overhead cleaning equipment.
6. An automatic top roll weight increase occurs only when roll laps up, thus assuring even performance for companion boss, not lapped up;
7. Special releasing tool provided and required to change settings assures no tampering by unauthorized persons.

Adaptable to nearly every type of drafting system, the method uses a tension bar which exerts pressure on the rolls through deflection. The deflection can be controlled, thus allowing an adjustment of pressure applied. Releasing is accomplished in three seconds with the special tool.

Dixon Corp., Bristol, R. I.

Do you want more data? Write ☁ or use card on page 281; list E-111

By skillful plating and finishing, National Sterling is producing travelers which greatly outwear and outperform other travelers. Practically frictionless, they run much longer (many customers report over three times regular traveler life) . . . produce more first class yarn at higher spindle speeds, with fewer ends down. For true operating economies, whatever fibers you are running, ask for the Special Finish on National Sterling Travelers.

A National Sterling engineer will gladly recommend the right traveler to help cut your spinning costs. For prompt service, write, wire or phone National Ring Traveler Company and Sterling Division, 354 Pine St., Pawtucket, R. I.; Southern Office and Warehouse: P. O. Box 293, Gaffney, South Carolina.

American Textile Machinery Exhibition - International
ATMA
Parade of Progress
Atlantic City Auditorium
May 23 thru 27-1960
Atlantic City, N.J., U.S.A.

See us at Booth 89-90

NATIONAL Sterling
RING TRAVELERS

F. L. CHASE, JR., Pres. & Treas. L. I. TAYLOR, Southern Mgr.
FOR SPINNING AND TWISTING ALL NATURAL AND SYNTHETIC FIBRES
There's a NATIONAL man nearby!

H. B. ASKEW
P. O. Box 424
Griffin, Ga.
Tel. GRiffin 7647

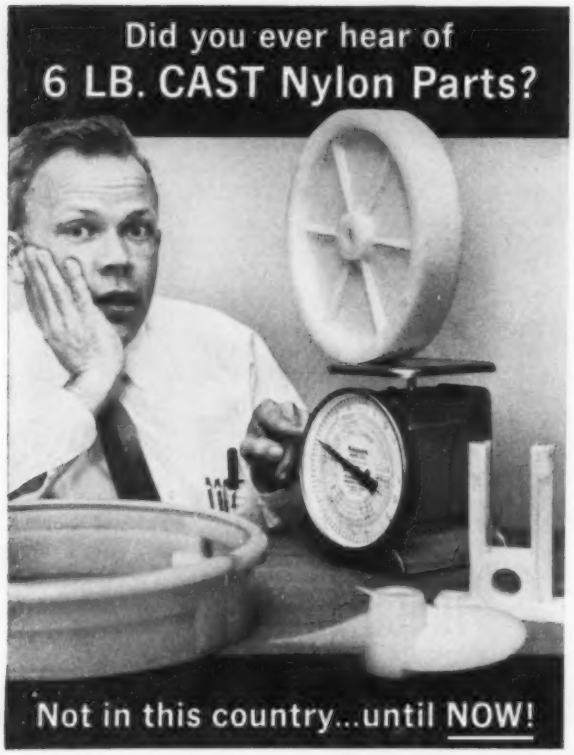
T. H. BALLARD
112 N. Ninth St.
Belmont, N. C.
Tel. TAlmedge 5-2436

F. S. BEACHAM
P. O. Box 511
Honea Path, S. C.
Tel. EMerson 9-7302

C. L. FITTS
2205 St. Mark Rd.
Greensboro, N. C.
Tel. BRoadway 4-0450

J. T. GREENLAW
Glen Haven Circle
Saco, Maine
Tel. ATlantic 4-6298

Export Agent: A. M. ROMERO CORP., 350 Fifth Avenue, New York 1, N. Y.



Until *NOW* the costly molds and equally expensive equipment for molding nylon have restricted its application to large volume runs of extremely lightweight parts.

Now Nylon Molded Products Corp., the prime source for quality nylon parts in America, introduces in America...

NYLOCAST

a licensed European process for casting nylon parts up to 6 pounds. With this exclusive method, heavy nylon castings are made practical through fractional tooling costs, lower running rates and short run requirements.

This process makes use of higher viscosity nylon (said to have better physical properties) than can otherwise be used. Yet there is practically no limitation on cast-in inserts, threads, lugs, intricate shapes or varying thicknesses.

So, if you have a problem in

- Lubrication
- Machining
- Corrosion
- Abrasion

of intricate, massive parts, where the properties of nylon may solve the problem, please contact us for help and advice on

NYLOCAST

an exclusive service of

NYMOLD

NYLON MOLDED PRODUCTS CORP., GARRETTSVILLE 9, OHIO

New finishes and chemicals

Flameproofing acetate fibers and blends of acetate with cotton and linen may be accomplished with a retardant called Flamort-U. The agent is colorless, will not affect tensile strength, may be sprayed on or soaked into the fabric, and must be reapplied after launderings.

Flamort Chemical Company, 746 Natoma St., San Francisco 3, Calif.

Do you want more data? Write supplier or use card on page 281; list E-201

A styrene-butadiene latex gives soft hand to fabrics but does not require vulcanization. The product—Dylex K-40—permits an increase in carpet pliability, especially where scrim is applied, and is suited to automotive upholstery fabrics because of its flexibility. It retains its flexibility under extreme aging conditions.

Koppers Company, Inc., Plastics Div., 2010 Clarke Bldg., Pittsburgh 19, Pa.

Do you want more data? Write supplier or use card on page 281; list E-202

A durable antistatic agent is applied without complicated processing. Called Aston 123, it is mixed with Eponite 100 in desired ratio, padded onto the fabric in a bath of pH of 6 to 8, and dried at temperatures between 250 F and 300 F. Cross linking occurs with complete drying, and excellent durability is usually experienced with a solids content from one to two percent (Aston 123 to Eponite 100 ratio: eight to two or seven to three).

Onyx Oil & Chemical Co., Jersey City, N. J.

Do you want more data? Write supplier or use card on page 281; list E-203

The leveling agent known as Leveling Salt LV assists in giving deep, level, and solidly dyed shades on wool and/or nylon stock, yarns, or fabrics. It is applied with the dye under processing conditions, pH 4 to 6, that should be used for neutral dyes—eliminates barré in dyeing nylon carpet, retains the soft hand of wool. Since it is not a retardant, it permits complete bath exhaustion and allows shades to be matched by adding color in process. While it serves the dual purpose of wetting out the fiber and of controlling the dyeing, its use does not have any adverse effect on the fastness properties of the dyes used.

American Cyanamid Co., 30 Rockefeller Plaza, New York 20, N. Y.

Do you want more data? Write supplier or use card on page 281; list E-204

An adhesive for laminating vinyl to fabric (Polybond LS-13) features excellent hand and drape, exceptional bond strength, easy machinability, and superior aging characteristics. Additionally, it may be used as an adhesive in packaging and in certain industrial applications.

Adhesion Division, Polymer Industries, Inc., Viaduct Rd., Springdale, Conn.

Do you want more data? Write supplier or use card on page 281; list E-205

The one-step washing and finishing compound known as Metrosol RX is recommended for the washing of woolen and wool-blend sweaters and other garments after knitting. It does a quick, efficient job, gives very low oil residue, and can be used on all types of garments—including heathers and fancy striped goods — without danger of color bleeding into the light stripes.

Laurel Soap Mfg. Co., Inc., Tioga, Thompson and Almond Sts., Philadelphia 34, Pa.

Do you want more data? Write supplier or use card on page 281; list E-206

A reactive acrylic latex "solves the problem on non-

woven washability and dry cleanability" and is applicable as a backing to a great number of other fabric types—upholstery and drapery, e.g.—and as an adhesive or laminating agent. Called Hycar 2671, only its viscosity need be changed to fit it for application as a backcoater over a wide range of goods to improve washfastness, hand, dry cleanability, and resistance to discoloration.

B. F. Goodrich Chemical Co., 3135 Euclid Ave., Cleveland 15, Ohio.

Do you want more data? Write supplier or use card on page 281; list E-207

Ferric, ferrous, and nonferrous ions are kept in solution by Seqlene sequestering agents that have the ability to sequester and dissolve harmful metals from caustic solutions and to hold them in solution even when the pH is lowered below the neutral point. Iron staining is thus prevented or reduced.

A. E. Staley Manufacturing Co., Decatur, Ill.

Do you want more data? Write supplier or use card on page 281; list E-208

Fibrous resins for denser types of nonwovens utilize their property of returning to their original lengths when heated to supply bulking and bonding. Made in fiber lengths from very short to a maximum of 3/16", the thermoplastics—a vinyl copolymer, VXKA-6112 and a polystyrene, SXKA-0121—are applied to the fibers before carding and after the web is collected are subjected to adequate heat to force the shrinkage. The fibers are very irregular in shape and are of diameters ranging from 2 to 200 microns.

Union Carbide Plastics Co., Div. of Union Carbide Corp., 30 East 42 St., New York 17, N. Y.

Do you want more data? Write supplier or use card on page 281; list E-209

Makes low-cost polyethylene packages

A polyethylene packaging machine, the Seal A Round, produces a plastic package and seals it on four sides (or three sides only) with one simple operation and at a cost of as little as ¼¢ per package. Its quick, semiautomatic action can produce 4000 packed pieces per day as compared with only 2000 per day in hand packing. It is simple to operate, requires no skill nor special training, and uses polyethylene continuous center folded roll stock.

The operative places the item to be packaged between two layers of folded film, pulls it across a sealing station and, with just one press of the handle, heat seals all the open sides, producing a package completely sealed and

For IMPROVED and SPEEDED processing ... with REDUCED WASTE

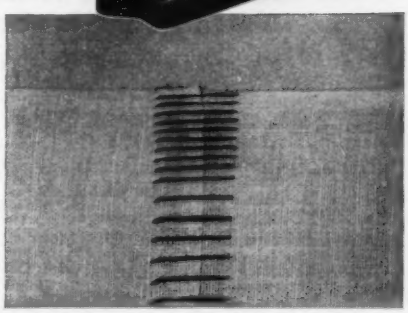
MERROW NOW OFFERS ... *IN A SINGLE MACHINE*

- ***WIDER STITCHING***

plus

- ***MULTIPLE STITCHING AT SELVAGES***

Style 60 Y3B
Butted Seamer



Some processors require a wide butted seam to eliminate "combing out" of coarse material under tension. Others, handling high count materials, need multiple stitching at the selvages for extra strength. Merrow now makes available a machine that fills **both** requirements.

The strong one thread seam (approximately ⅝" wide) is quickly and accurately formed by the high speed machine ... can be easily removed after processing. Result: improved processing ... higher production ... reduced waste.

Request complete information on this or other machines in the Merrow **complete line** of butted seamers.

TRADE MARK REG
The MERROW MACHINE COMPANY
2805 LAUREL ST. • HARTFORD, CONN. • U.S.A.

SACCARDO

PAPER TUBES

for SPINNING —
ROVING — TWISTING

- SYNTHETICS
- COTTON
- WOOL
- SILK

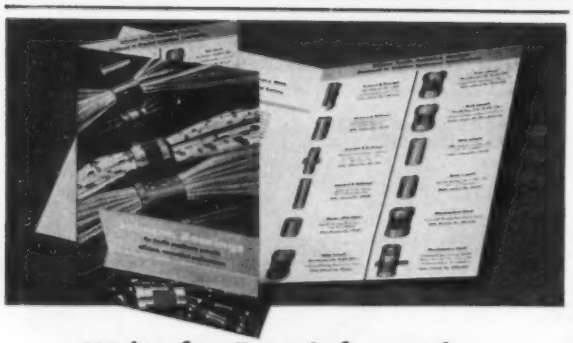
STRAIGHT or TAPERED
IMPREGNATED-BAKELIZED
PLASTIC COATED for
STEAM CONDITIONING

STEAM PROOF — COLOR PROOF

BRASS or STEEL FERRULES • NICKEL PLATED

LENKOTEX COMPANY, INC.

136 LIBERTY ST. • NEW YORK 6, N. Y.
Atlantic City Exhibition Booth 663



Write for Free Information
on Johnson Textile Machinery
Replacement Bearings

The ordering of maintenance material for textile machinery is simplified with this new Johnson folder which illustrates and describes a wide range of bearings for several leading makes of textile equipment.

You can order in confidence for Johnson Bearings are made to the exact specifications of the original equipment. The design of each bearing, its alloy, size-tolerances and oil grooving all are identical with the bearing to be replaced.

For your free copy of this Johnson Textile Bearing Folder JBL-9, write Johnson Bronze Company, 530 S. Mill Street, New Castle, Pa.

Johnson Textile Bearings

automatically made to fit the contents exactly. It adjusts itself for any package size, can handle irregular shaped products including clothing and soft goods, and is offered in two sizes: one takes packages up to 12" x 18"; the other to handle packages up to 18" x 24".

Seal A Round Corp., 2024 S. Wabash Ave., Chicago, Ill.

Do you want more data? Write supplier or use card on page 281; list E-210

Equipment briefs

Short-run nylon castings weighing up to six pounds are available in a nylon of higher viscosity than formerly could be used for such castings. The casting process, by permitting moderate costs to be applied to short-run, heavy castings, solves a number of problems in lubrication, complex machining, and corrosion resistance by offering nylon's special properties to industry in forms not previously available at acceptable cost. There is practically no limit to the shapes, lugs, cast-in threads, intricate shapes, and varying thicknesses available through the process.

Nylon Molded Products Corp., Garretsville, Ohio.

Do you want more data? Write supplier or use card on page 281; list E-211

Time-study aid. A sequence timing board for actuating three stop watches at precisely the same instant with a simple squeeze of the hand which carries the board insures greater accuracy of data and is much more convenient. Called the "Multi-Sequence Board," the unit times sequential steps with zero time loss between those steps, and with no necessity to read timer hands while they are in motion. Board accommodates any stop watch of standard size.

Heuer Timer Corp., 441 Lexington Ave., New York 17, N. Y.

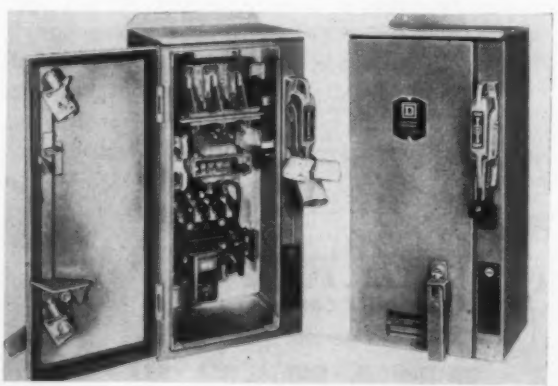
Do you want more data? Write supplier or use card on page 281; list E-212

Fast air and condensate removal are provided by bellows thermostatic steam traps for steam systems and equipment requiring fast heat-up and continuous drainage. Each trap is fitted with orifice that operates automatically over entire pressure range.

The Clark Mfg. Co., 1830 E. 38th St., Cleveland 14, Ohio.

Do you want more data? Write supplier or use card on page 281; list E-213

Switch-type combination starters, furnished in NEMA 12 dust-tight enclosures, incorporate entirely new disconnect-switch and door-closing mechanisms to provide extra safety for both maintenance and operating personnel. The unit eliminates false indication of switch position when door is open; handle is always in control

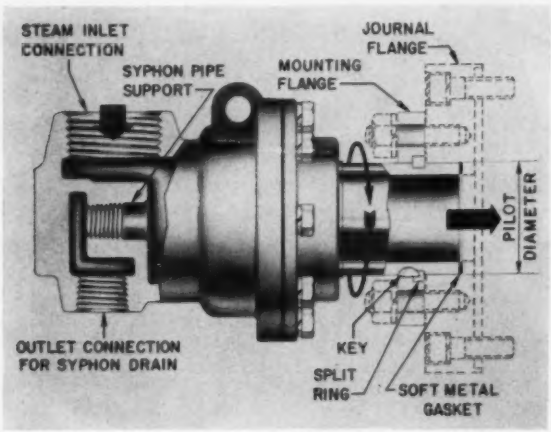


of the switch — with door open or closed; door cannot be opened with the switch ON unless a by-pass is operated, and the switch can be operated only when door is latched and sealed. Interchangeable fuse clips can be spaced to accommodate either 250-volt or 600-volt fuses.

Square D Company, 4041 North Richards St., Milwaukee 12, Wis.

Do you want more data? Write supplier or use card on page 281; list E-214

Rotary joint is easier to install. Improved convenience of installation and accurate control of concentricity are features of new Type CF rotary joints for slashers, dry cans, etc. Eliminates need for threaded connection of the



rotary sleeve. Attachment of joint to equipment is by means of a mounting flange keyed to the rotating sleeve and drawn up against a spacing ring. Sealing of joint against leakage at end of rotating sleeve is by use of a soft metal gasket. Bearings and seal are self-lubricating. Seal is self-adjusting for wear, eliminating need for periodic take-up or adjustment.

Barco Mfg. Co., 500 Hough St., Barrington, Ill.

Do you want more data? Write supplier or use card on page 281; list E-215

A vertical chain oiler will greatly extend the life of chains used on vertical chain drives and at the same time reduce power bills by an average of 15 per cent. Consisting of a brush applicator, an oil dispenser, and copper tubing connecting the two components, the system can be operated with either manually or automatically controlled oil dispensers.

Oil-Rite Corp., 2318 Waldo Blvd., Manitowoc, Wis.

Do you want more data? Write supplier or use card on page 281; list E-216

Fractional to 1 hp variable-speed pulleys. A new line of variable speed pulleys consists of five sizes ranging from fractional to 1 hp and with speed ratios up to 2.8 to 1. Easy to install. Curved pulley faces for full belt contact. High ratio for small face diameter. Positive lubrication. Compact, lightweight construction.

Lovejoy Flexible Coupling Co., 4949 W. Lake St., Chicago 44, Ill.

Do you want more data? Write supplier or use card on page 281; list E-217

Soaks up oil, grease, chemicals on floors. When "Oil Spunj," a specially processed sanitary mineral clay, is spread ⅛" thick on wood, metal, or concrete floors, it absorbs oil, grease, acids and other chemicals. The product is easily swept off floor after it is saturated. Can be reused with soluble oil.

Canfield Oil Co., Cleveland 27, Ohio.

Do you want more data? Write supplier or use card on page 281; list E-218

IT'S FIRST! — IN SKEWED WEFT CORRECTION!

Mount Hope Automatic SKEW LINER

The choice of *PROFIT-WISE* management!

Mill executives know that profits depend upon low-cost, trouble-free production — particularly the elimination of skewed weft problems. Leading mills have tested the Mount Hope SKEW LINER, with its Electro-Mechanical Detection System, and have found it far superior for handling all weights of materials from sheers to many decorative fabrics.

The Mount Hope SKEW LINER is being used by leading Finishing plants in all textile areas. Representative plants are: —

Sayles Finishing Plants, Inc.
Sayles Bleacheries Division
Saylesville, Rhode Island

Riegel Textile Corporation
Ware Shoals Division
Ware Shoals, South Carolina

Cranston Print Works, Inc.
Cranston, Rhode Island

Waumbec Dyeing & Finishing Co.
Manchester, New Hampshire

Sayles Biltmore Bleacheries, Inc.
Biltmore, North Carolina

Waldrich Company
Delawanna, New Jersey

Southern Bleachery & Print Works, Inc.
Taylors, South Carolina

Burlington House Fabrics Finishing Co.
Burlington, North Carolina

— and many others.

Their experience with this modern, sensitive, truly-automatic detection system suggests that you write *today* for literature giving FACTS and PROOF that it can cut your costs.

STEP UP! — TO POSITIVE SKEWED WEFT ELIMINATION!

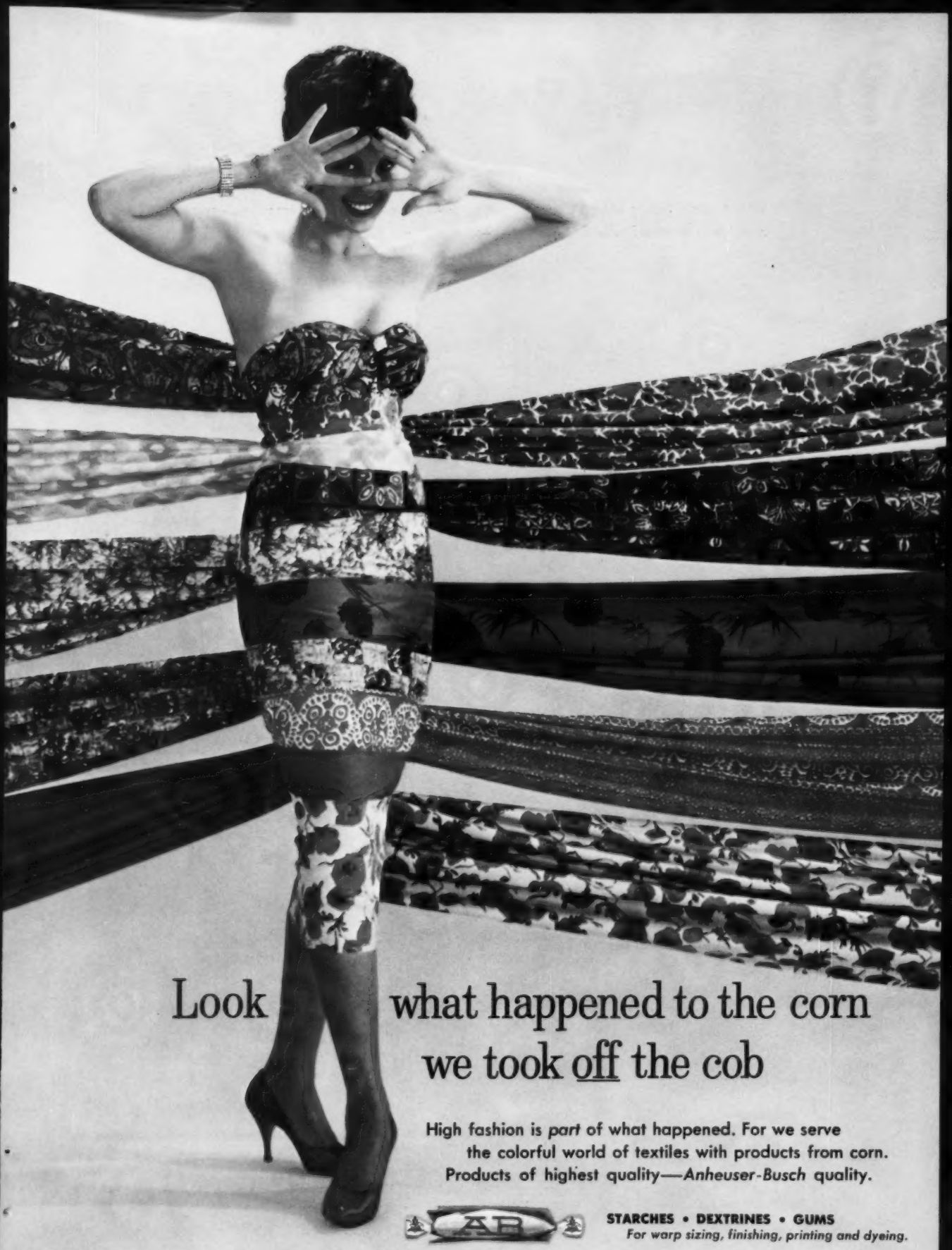
For full information write for Bulletin #*A.S.L.* or better still why not talk it over with a Mount Hope Engineer.

Mount Hope MOUNT HOPE MACHINE COMPANY, INC.
52 FIFTH STREET • TAUNTON, MASS.
PLANTS AT
TAUNTON, MASS., CHARLOTTE, N.C., U.S.A. and DARTFORD, KENT, ENGLAND
WORLD WIDE DISTRIBUTOR
MOUNT HOPE MACHINERY S.A. • LAUSANNE, SWITZERLAND

Investigate the **super versatility** of the Leesona **Model** 10 Ring Twister. **Plies** Man-Made Fibres • Glass • Cotton • Silk • Wool • Worsted • Combination Yarns • **Delivers** from Cones • Cheeses • Cakes • Pirns • Spools • Bobbins • On to Taper-Top • Double-Taper and Straight-Wind packages. Manufactured by **Leesona Corporation,** P. O. Box 1605, Providence 1, R. I.

LEESONA

237.9.1



Look what happened to the corn we took off the cob

High fashion is *part* of what happened. For we serve the colorful world of textiles with products from corn. Products of highest quality—*Anheuser-Busch* quality.

STARCHES • DEXTRINES • GUMS
For warp sizing, finishing, printing and dyeing.

ANHEUSER-BUSCH, INC., Bulk Corn Products Division, St. Louis, Missouri

FREE BOOKLETS

5-1 DECORATIVE SPRAY. Booklet describes how unusual decorative effects may be obtained by spraying cloth with vinyl plastic. Flexible Products Company, P. O. Box 306, Marietta, Georgia.

5-2 TENSION MASTER. Booklet describes basic principals behind the design and operation of the Mount Hope Tension Master for controlling web tensions. Mount Hope Machinery Co., 15 Fifth St., Taunton, Mass.

5-3 MOTOR CONTROL. Booklet is an excellent source of information for engineers who specify motors and controls. Allis-Chalmers Mfg. Co., Box 512, Milwaukee, Wisc.

5-4 ROLLER CHAINS & SPROCKETS. Stock sizes of roller chains and sprockets available for delivery in major industrial areas are listed in book. Link-Belt Co., Dept. PR, Prudential Plaza, Chicago 1, Ill.

5-5 TYPE 700 NYLON. Bulletin N-123 describes typical properties as well as the effects of moisture, heat, light, and chemicals on Type 700 Nylon. Textile Fibers Department, E. I. du Pont de Nemours & Co., Wilmington, Del.

5-6 COATED ABRASIVES. Selector chart carries recommendations for coated abrasives for card room and machine shop. Coated Abrasives Division, The Carborundum Company, P. O. Box 477, Niagara Falls, N. Y.

5-7 INDUSTRIAL FABRICS. Brochure describes wide range of industrial fabrics and custom finishing and printing services available. Advertising Department, Fulton Cotton Mills, P. O. Box 1726, Atlanta, Ga.

5-8 HUMIDITY TABLES. Handy pocket card provides an inexpensive method of measuring the level of the relative humidity in hosiery mills. Fidelity Machine Co., Inc., 3908 Frankford Ave., Philadelphia 24, Pa.

5-9 PIN DRAFTER. Job Report No. 25 describes case history of the pin drafter at Anglo Fabrics Company, Incorporated. Warner & Swasey Co., 5701 Carnegie Avenue, Cleveland, Ohio.

5-10 AC MAGNETIC STARTERS. Bulletin gives full engineering data on AC Magnetic Starters, type "CY". Clark Controller Co., 1146 E. 152nd St., Cleveland 10, Ohio.

5-11 PSYCROMETRIC CHART. Expanded psychrometic chart now includes curves to 350°F dry bulb temperature. J. O. Ross Engineering, Div. Midland-Ross Corp., 730 Third Avenue, New York 17, N. Y.

5-12 LOOM AND CARD TIME CLOCK. Booklet describes a time clock for looms and cards which the machines can punch. Also applicable to finishing, slashing and knitting. The Service Recorder Co., 1015 East Rockwell Ave., Cleveland 14, Ohio.

5-13 BETTER MERCERIZING. Booklet describes Sul-Fon-Ate BL Extra for fast saturation, cost reduction, ease of handling, no toxicity and better width control. Section C-5, Marketing Research & Development Dept., Tennessee Corp., 1330 W. Peachtree St., Atlanta, Ga.

5-14 MATERIALS HANDLING DEVELOPMENTS. Booklet describes engineering developments of special trucks for special problems in textile mills. Fisher Manufacturing Co., Inc., Box 350, Hartwell, Ga.

5-15 CENTRIFUGAL PUMPS. Handbook gives general forms and types of centrifugal pumping equipment. Useful in pump selection. This booklet is NOT FREE, but costs $5.00 per copy postpaid. Buffalo Pumps Division of Buffalo Forge Company, Dept 57, 490 Broadway, Buffalo, New York.

5-16 CLOTH GUIDE CONTROL. Folder describes application of hydraulic relay signal to keep rolls in line during processing. The North American Mfg. Co., 4455 E. 71st Street, Cleveland 5, Ohio.

5-17 GEON LATEX 576. Bulletin describes the advantage of using Geon Latex 576 as a binder for non-woven fabrics. B. F. Goodrich Chemical Co., 3135 Euclid Avenue, Cleveland 15, Ohio.

5-18 WARP SIZING PRODUCTS. Bulletin discusses briefly the range of Ahco products for warp sizing. Bulletin 2004. Arnold, Hoffman & Co., Inc., 55 Canal St., Providence, R. I.

5-19 DRYING EQUIPMENT. Bulletin describes Proctor Drying Equipment for textiles, including pictures, diagrams deminsions. Proctor & Schwartz, Inc., Seventh & Tabor Rd., Philadelphia, Pa.

5-20 INDUSTRIAL MIXERS. Booklet describes Shear-Flow industrial mixers for blending, dispersing and homogenizing. Gabb Special Products, Inc., Windsor Locks, Conn.

5-21 DOUBLE CYLINDER KNITTER. Brochure describes ESTA double cylinder knitting machine, including patterning possibilities, output, etc. Morris Speizman Co., Inc., 508 W. Fifth St., Charlotte, N. C.

TI'S INFORMATION CENTER

BOOKLETS • NEW EQUIPMENT • ADVERTISEMENTS

Help yourself to free literature and more details on any products mentioned in this issue.

Instead of writing a dozen different manufacturers for free literature and more information on equipment, supplies, or services, just insert in the appropriate space provided on one of these postage-free cards the key numbers of the items in which you are interested, and drop the card in the nearest mail box. Use the cards also to get details on any advertisement—just insert the name of the company and page number in the space provided.

TI pays the postman!

MAY 1960

Send free information on these NEW PRODUCTS and/or services (fill in key numbers):

_____ _____ _____ _____ _____ _____

_____ _____ _____ _____ _____ _____

_____ _____ _____ _____ _____ _____

Send this FREE LITERATURE (fill in key numbers):

_____ _____ _____ _____ _____ _____

_____ _____ _____ _____ _____ _____

_____ _____ _____ _____ _____ _____

Send free information on these ADVERTISEMENTS:

Company_____ Page_____ Company_____ Page_____

Company_____ Page_____ Company_____ Page_____

My Name _____ Position_____

My Company's Name _____

Address (number and street) _____

City _____ Zone_____ State_____

MAY 1960

Send free information on these NEW PRODUCTS and/or services (fill in key numbers):

_____ _____ _____ _____ _____ _____

_____ _____ _____ _____ _____ _____

_____ _____ _____ _____ _____ _____

Send this FREE LITERATURE (fill in key numbers):

_____ _____ _____ _____ _____ _____

_____ _____ _____ _____ _____ _____

_____ _____ _____ _____ _____ _____

Send free information on these ADVERTISEMENTS:

Company_____ Page_____ Company_____ Page_____

Company_____ Page_____ Company_____ Page_____

My Name _____ Position_____

My Company's Name _____

Address (number and street) _____

City _____ Zone_____ State_____

These cards can help you get valuable information

Postage Will be Paid by Addressee

No Postage Stamp Necessary If Mailed in the United States

BUSINESS REPLY CARD
FIRST CLASS PERMIT NO. 582, SEC. 34.9, P. L. & R., ATLANTA, GA.

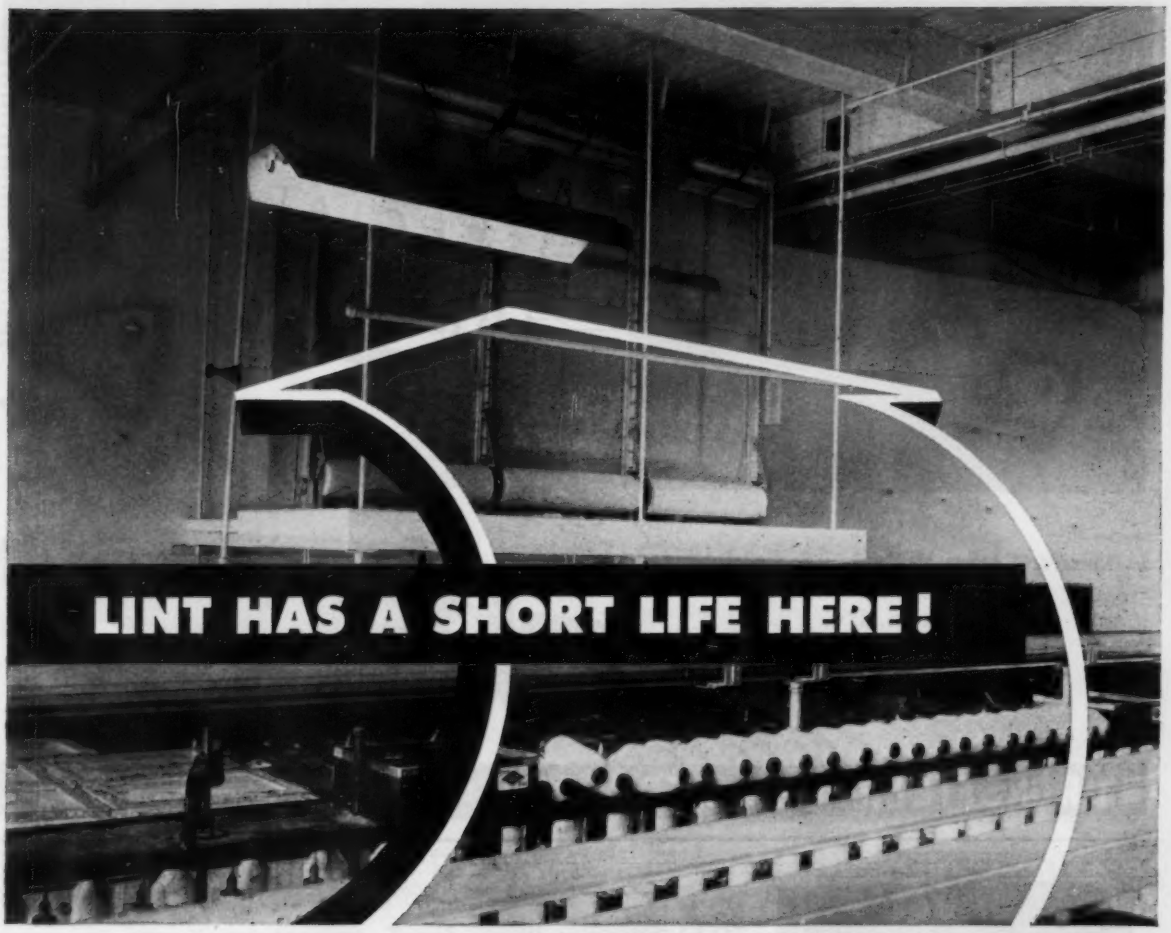
Textile Industries
806 PEACHTREE ST., N. E.
ATLANTA 8, GEORGIA

Postage Will be Paid by Addressee

No Postage Stamp Necessary If Mailed in the United States

BUSINESS REPLY CARD
FIRST CLASS PERMIT NO. 582, SEC. 34.9, P. L. & R., ATLANTA, GA.

Textile Industries
806 PEACHTREE ST., N. E.
ATLANTA 8, GEORGIA



The spinning room at Pepperell Manufacturing Company, Lindale, Georgia.

AAF Auto-AIRMAT filters "de-lint" air in spinning room at Pepperell's Lindale Mill

The fly created during spinning operations at Pepperell Manufacturing Company, Lindale (Georgia) Division, never gets any further than the bank of Auto-AIRMAT filters mounted in the wall. Nothing but lint-free air gets beyond the Auto-AIRMATS to important yarn-processing operations in the next room.

The AAF Auto-AIRMAT is the *only* filter designed to remove fly from the air and clean itself at the same time. Airmat filtering material, winding from roll at top of unit, moves automatically down the face of the filter, collecting lint all the way—re-winds into easily disposable roll at bottom.

If you have a *lint problem,* get all the facts on the *lint filter*—the AAF Auto-AIRMAT. Call your AAF representative or write direct for Bulletin 234. Address: Mr. Robert Moore, American Air Filter Company, Inc., 275 Central Avenue, Louisville, Kentucky.

AAF American Air Filter

BETTER AIR IS OUR BUSINESS

10,000,000 CARDING POINTS NEED PERFECT GRINDING ROLLS

THE CARD-GRINDING SPECIALISTS

DRONSFIELD'S

TRAVERSE WHEEL GRINDER No 120

Enquiries to —

Messrs. Cotton-McCauley & Co. Inc.,
3, Hammond Street,
Greenville, S. C.
and
188, Main Street,
Pawtucket, R. I.

SOLID GRINDING ROLL No 112

DRONSFIELD BROTHERS LTD · OLDHAM · ENGLAND

BOOKLETS

raw stock to roving

T-101 **LUMMUS PEPPER - SHAKER OPENER.** Gives complete details and photographs. Aldrich Machine Works, P. O. Box 750, Atlanta, Ga.

T-102 **STATIC ELIMINATION.** How to eliminate static safely and inexpensively. Simco Co., 920 Walnut St., Lansdale, Pa.

T-103 **CARD GRINDING INFORMATION.** Care and operation of cards. B. S. Roy & Son Co., Worcester, Mass.

T-105 **VERSA - MATIC DRAWING FRAME.** Describes drafting elements, quality of sliver, roving and yarn possible. Saco-Lowell Shops, 60 Batterymarch St., Boston, Mass.

T-106 **SARGENT OPENER.** Describes opener with rotary evener and stripper. C. G. Sargent's Sons Corp., Graniteville, Mass.

T-107 **FEATHERTOUCH DRAFTING.** How to get "highest production per frame at lowest cost." Ideal Industries, Inc., Bessemer City, N. C.

T-110 **BOBBINS.** Catalog describes metal, wood and plastic bobbins. Illustrations show actual use. Lestershire Spool Div., National Vulcanized Fibre Co., Wilmington, Del.

T-111 **MAGNETIC IDEAS.** Booklet shows uses of permanent magnetic separation equipment in opening room as well as throughout mill. Removes tramp iron, prevents fires. Eriez Mfg. Co., Erie, Pa.

T-112 **ADVANTAGES OF ALDRICH PICKERS.** Good technical text, comprehensive pictures. Aldrich Machine Works, P. O. Box 750, Atlanta, Ga.

T-113 **NEW CONDENSER TAPE.** Describes Supr-O-Tape, an impregnated fabric condenser tape. Benjamin Booth Co., Allegheny Ave. & Janney St., Philadelphia 34, Pa.

T-119 **FIBER METER.** Automatic weighing and blending assures quality, holds variation to 1%. James Hunter, Inc., P. O. Box 298, Mauldin, S. C.

T-120 **PIN DRAFTERS.** Textile job report No. 21 tells how Warner & Swasey Pin Drafters help modify jute systems for carpet yarns. Warner & Swasey Co., 5701 Carnegie Ave., Cleveland 3, Ohio.

T-121 **UNIVERSAL CARD COILER.** Literature describes both head and base swivel for adjustment. Includes data on 90-day free trial. McDonough Power Equipment, Inc., McDonough, Ga.

T-122 **RECONDITION OPENING & CLEANING.** Bulletin gives whys and wherefores of reconditioning your opening and cleaning lines. Special attention given to each machine with suggestions as to parts replacement. Saco-Lowell Shops, 60 Batterymarch St., Boston 10, Mass.

T-123 **COILER CONVERSIONS.** Full facts on low initial cost conversion to larger coiler cans. Lists advantages, has complete description. Southern States Equipment Corp., Hampton, Ga.

T-124 **CARD DRIVE.** Bulletin 301-a describes simple, safe, efficient individual card drive. Southern States Equipment Corp., Hampton, Ga.

T-132 **PROCTOR SUPER PICKER.** Data sheet gives details of the Proctor Super Picker for use on slabs of baled cotton, or wool and synthetic blends in layers up to 12" thick. Proctor & Schwartz, Inc., 7th St. and Tabor Rd., Philadelphia 20, Pa.

T-133 **ANTI-STATIC AGENT.** Data sheet lists basic characteristics of liquid anti-static agent which eliminates processing difficulties with fibers due to static electricity. E. F. Houghton & Co., 303 West Lehigh Ave., Philadelphia 33, Pa.

yarn and warp making

T-201 **PRODUCTS FOR SPINNING AND WEAVING.** Complete line, applications, advantages shown. Dayton Rubber Co., Textile Div., Dayton, Ohio.

T-202 **NEW BOBBIN MANUAL.** Complete bobbin guide. Lestershire Spool Division, National Vulcanized Fibre Co., Wilmington 99, Delaware.

T-203 **SPINDLE OIL.** "Gulfspin" insures against excessive wear and eliminates spindle wobble. Gulf Oil Corp., Gulf Bldg., Pittsburgh, Pa.

T-205 **HIGH SPEED AUTOMATIC QUILLER.** Lists advantages and dimensions of "Autocopser." Terrell Machine Co., Inc., P. O. Box 928, Charlotte, N. C.

T-208 **PACKAGED SPINNING MODERNIZATION.** Details on Collecto-Vac, Open-Aire Creels, Cross-Jet Cleaner, Air Conditioning. Bahnson Company, Winston-Salem, N. C.

Keep ahead of competition

Better quality finishing by MONFORTS machines

For free booklet
covering our production program
apply to Industrial Equipment Co.
1411 Johnston Bldg., Charlotte 2, N.C.
or directly to the manufacturer

A. MONFORTS MASCHINENFABRIK
M.GLADBACH
Western Germany

BOOKLETS

T-209 **SECTIONAL WARPER.** Describes full width and sectional warpers for knitting, weaving. Robert Reiner, Inc., Weehawken, New Jersey.

T-210 **CONICAL RINGS AND FLYERS.** Complete details and specifications. Herr Manufacturing Co., Inc., 318 Franklin St., Buffalo 2, New York.

T-211 **PRECISE WINDING MACHINE.** For winding pineapple or straight cones and tubes of synthetics. Foster Machine Co., Westfield, Mass.

T-212 **AUTOMATIC CLEANING EQUIPMENT.** Working details and advantages of the Tri-Rail Cleaner. American MonoRail Co., 111 East 200th St., Cleveland 17, Ohio.

T-216 **SPINNING FRAME CONVERSIONS.** Big-package, new-frame results at half the cost. Meadows Mfg. Co., P. O. Box 10876, Station A, Atlanta, Ga.

T-217 **COLLECTO-VAC.** New development collects lint, fly and broken ends. The Bahnson Company, Winston-Salem, N. C.

T-219 **SPINNING AND TWISTER RINGS.** Complete details, pictures, price list. Whitinsville Spinning Ring Co., Whitinsville, Mass.

T-222 **SUCTION CLEANING SYSTEM.** Details on new Collector Unit Model C-4. Pneumafil Corp., Charlotte 8, N. C.

T-223 **FACTS ABOUT YOUR FLYERS AND SPINDLES.** Advantages of smooth flyer and spindle operation. Ideal Machine Shops, Bessemer City, N. C.

T-225 **LAPLESS ENDLESS SPINNER.** Full information available. Ton-Tex Corporation, 31 Columbus Ave., Englewood, N. J.

T-227 **SPINDLE OILING MACHINE.** Features and advantages noted. Wicaco Machine Corp., 4800 Stenton Ave., Wayne Junction, Philadelphia 44, Pa.

T-228 **HANDY SPINNING REFERENCE.** Shows traveler speeds, sizes of ring flanges. Saco-Lowell Shops, Parts Replacement Division, P. O. Box 327, Greenville, South Carolina.

T-229 **UNIRAIL UPTWISTER.** Higher yarn quality and better packages at faster speeds. Leesona Corp., P. O. Box 1605, Providence, R. I.

T-230 **PRECISION TEXTILE WINDING.** Tensions and density control for winding rubber cones. Kidde Textile Machinery Corp., Farrand St., Bloomfield, N. J.

T-231 **CONE WINDER.** Describes Model 102 winder, including applications. Foster Machine Co., Westfield, Mass.

T-232 **SHORT CUT TO STAPLE FIBER SPINNING.** Ten steps in operation of the Tow Stapler. Turbo Machine Co., Lansdale, Pa.

T-233 **WEAVER'S KNOTTER.** Instructions as to use, description. A. B. Carter, Inc., Gastonia, N. C.

T-234 **TEXTILE ROLL COVERINGS.** Describes complete line as well as other mill supplies. Armstrong Cork Co., Industrial Div., Lancaster, Pa.

T-239 **LARGE PACKAGE TWISTER.** Information on new anti-friction Jumbo Twister which carries a 14" bobbin with a 12" build. Meadows Mfg. Co., P. O. Box 10876, Sta. A, Atlanta, Ga.

T-241 **PACEMAKER TWISTERS.** Folder gives details on high production, outlines notable features. Whitin Machine Works, Whitinsville, Mass.

T-242 **RING SPINNING FRAME.** Folder presents description, illustrations and specifications of up-to-date Simplex ring spinning frames. Davis & Furber Machine Co., North Andover, Mass.

T-243 **ANTI-FRICTION TWISTER BEARINGS.** Find out how bearings helped make The Meadows Twister almost friction-free. Fafnir Bearing Company, New Britain, Conn.

T-246 **BETTER BEAMS.** Information on three ways to make better beams. Kidde Textile Machinery Corp., Farrand St., Bloomfield, N. J.

T-249 **VARI-SPEED MOTOR PULLEY.** Describes variable speed control through use of simplified three-major-part disc-assemblies with only one lubrication point. Reeves Pulley Co., Reliance Electric & Engineering Co., Columbus, Ind.

T-250 **SPINNING MODERNIZATION.** Booklet shows how lower costs and improved quality are obtained by spinning modernization. Roberts Company, Sanford, N. C.

BOOKLETS

T-255 **NEW BOBBIN HOLDER.** Details on streamlined, positive latching bobbin holder. Whitehead Die Casting Co., 1140 Zonolite Rd., Atlanta, Ga.

T-256 **HUMIDIFIER PROTECTION** — Brochure tells how "Rustex" can stop rust and corrosion and prevent discolored water in your humidifying system. Odorless and completely harmless to personnel, or goods. Anderson Chemical Co., Inc., Box 1424, Macon, Georgia.

slashing—weaving—tufting

T-301 **COUNTING AND MEASURING DEVICES.** Wide range of counting devices for all types of textile machinery. Veeder-Root, Inc., Hartford, Conn.

T-302 **LOOM SUPPLIES.** Describes complete line. E. H. Jacobs Northern Division, The Bullard Clark Co., Danielson, Conn.

T-304 **LOOM PRODUCTION CHARTS.** Celluloid card shows yards per loom per week. Ralph E. Loper Co., Greenville, S. C.

T-306 **THE STORY OF STARCHES.** History and information on manufacture and use of starches. National Starch & Chemical Corp., 750 Third Ave., New York 17, N. Y.

T-308 **STEEL WARP BEAMS.** Beams for both broadloom and narrow fabrics. Milton Machine Works, Inc., Milton, Pa.

T-309 **PENFORD GUMS IN TEXTILES.** Describes their excellent properties for warp sizing spun yarns. Penick & Ford Ltd., Inc., 750 Third Ave., New York 17, New York.

T-312 **AIR SLASHER DRYER.** Shows construction and operating details. Proctor & Schwartz, Inc., 7th St. and Tabor Rd., Philadelphia 20, Pa.

T-313 **BUTT-TACKING SEWING MACHINE.** Describes operation, installation of single thread butt-tacking sewing machine. The Merrow Machine Co., 28 Laurel St., Hartford, Conn.

T-314 **LOOM REED BOOKLET.** Describes in detail a variety of reeds. Steel Heddle Mfg. Co., 2100 West Allegheny Ave., Philadelphia 32, Pa.

T-315 **COCKER EQUIPMENT.** Information on warp sizer, beam warper, creels, tensions, back-winders, etc. Cocker Machine & Foundry Co., Gastonia, N. C.

T-318 **FORMULAS FOR SLASHING ARNEL.** Includes also information on warping, weaving and quilling. Textile Sales Dept., Celanese Corp. of America, P. O. Box 1414, Charlotte 1, N. C.

T-319 **ECLIPSE STARCHES FOR TEXTILES.** Data sheet describes use of thin-boiling starches in the textile industry, with particular emphasis on warp sizing. Physical and chemical data included. A. E. Staley Mfg. Co., Decatur, Ill.

T-321 **COCKER SLASHERS.** Complete specifications and advantages, including allied equipment. Cocker Machine & Foundry Co., Gastonia, N. C.

T-322 **MOUNTS FOR LOOMS.** Vinyl mount eliminates need for bolts or paste. Clark, Cutler, McDermott Co., 106 W. Central St., Franklin, Mass.

T-323 **UNIFIL LOOM WINDER.** Describes new concept of filling preparation which needs no quilling area. Leesona Corp., P. O. Box 1605, Providence, R. I.

T-324 **ALIGNING LAYS.** Setting instructions for step-by-step aligning. Draper Corporation, Hopedale, Mass.

T-325 **TRAVELING LOOM CLEANER.** Advantages of the new Oscillaire loom cleaner. Parks-Cramer Co., Fitchburg, Mass.

T-326 **DRAPER REPAIR PARTS CATALOG.** Contains illustrations covering all mechanisms and construction with complete listings. Draper Corporation, Hopedale, Mass.

T-327 **BALING PRESSES.** Describes complete line of motor-driven and hydraulic baling presses. Logemann Brothers Co., 3150 West Burleigh St., Milwaukee, Wis.

T-328 **TEXTILE MACHINERY PARTS CATALOG.** Describes complete line of Dayco and Thorobred textile parts. Dayton Rubber Co., Dayton, Ohio.

T-329 **COUNTING DEVICES.** Describes complete line of counters for every application. Trumeter Company, 38 W. 32nd St., New York 1, New York.

T-331 **STATIC BARS.** Humorously illustrates how static can be overcome. The Simco Co., 920 Walnut St., Lansdale, Pa.

T-332 **CARE OF DRAPER SHUTTLES.** Describes how longer, trouble-free service may be obtained. Draper Corporation, Hopedale, Mass.

T-336 **ONE-PIECE SIZING AGENT.** Houghto-Size CW provides low kettle cost, results in free-running warp of high breaking strength, increasing weaving efficiency. E. F. Houghton & Co., 303 West Lehigh Ave., Philadelphia 33, Pa.

T-346 **FACTS ON NON-WOVENS.** Fact file on non-wovens tells of new machinery, new methods of handling fibers, new bonding agents, etc. Curlator Corporation, Textile Div., E. Rochester, N. Y.

T-347 **NEW DRYING SYSTEM.** Describes high capacity, custom engineered drying equipment for tufted plants. Dalton Sheet Metal Co., Inc., Dalton, Ga.

T-351 **AUTOMATIC STOP MOTION.** Complete information available on automatic stop motion for Titan warp tying-in machine. Edda International Corp., 468 Fourth Ave., New York 16, N. Y.

T-353 **BACKING FOR TUFTEDS.** How to get your tufting necessities with one telephone call. Fulton Cotton Mills, P. O. Box 1726, Atlanta 1, Ga.

T-355 **NON-WOVEN FABRICS.** Booklet gives outline of nature and history of non-woven and the manufacturing techniques of today. Booklet 56-219A, Chemical Div., Goodyear Tire & Rubber Co., Akron 16, Ohio.

T-358 **LOOM SUPPLIES.** Information on rod lubricant and applicator, sponge leather bunter, picker. Garland Mfg. Co., 54 Water St., Saco, Me.

T-362 **SIZE THAT SATISFIES.** Information on getting the correct size package for your mill. Also on Bingham line of slasher rolls. Stodghill & Co., 716 Ponce de Leon Place, Atlanta, Georgia.

T-363 **RUBBER COVERED SLASHER ROLLS.** Handy booklet tells how to get longer life and better performance from rubber covered rolls. Includes data on handling, storing and grinding. Stowe-Woodward, Inc., Dept. C., 181 Oak St., Newton Upper Falls 64, Mass.

knitting

T-401 **SINGLEHEAD FULL - FASHIONED MACHINE.** Literature on request from the Wildman-Jacquard Div., Draper Corp., Hopedale, Mass.

T-403 **RASCHEL KNITTER.** Describes new Raschel-type knitting machine. Kidde Textile Machinery Corp., Inc., Farrand St., Bloomfield, N. J.

T-406 **NEEDLE OIL DOES NOT STAIN.** Details on "Gulftex 39" developed for knitting mills. Gulf Oil Corp., Gross & PRR, Pittsburg 30, Pa.

T-407 **KNITTING MACHINES.** Information on Wildman "TFS" 30" single section F-F machines and "AL" 30" diameter 32-feed "single purpose" circular interlock machine (rib type) Wildman-Jacquard Div., Draper Corp., Hopedale, Mass.

T-409 **KNIT GOODS FINISHING MACHINERY.** Data on calenders, shrinkers, curers, extractors, steamers. Tubular Textile Machinery Corp., 33-61 54th St., Woodside, N. Y.

T-410 **"READING" TYPE 60 F-F KNITTING MACHINE.** Information about the new "Reading" Type 60, 38-section automatic full-fashioned hosiery knitting machine. Write Textile Machine Works, Reading, Pa.

wet processing

T-500 **WEBB GUIDE SYSTEMS.** Folio No. EG-84 describes webb guide systems for cloth applications. G.P.E. CONTROLS, INC 240 E. Ontario St. Chicago 11, Ill.

T-501 **TUBES FOR PACKAGE DYEING.** Describes Dytex tubes for one-time use. Sonoco Products Co., Hartsville, S. C.

T-502 **FINISHING MACHINERY.** Text and photographs of complete line of machinery. Marshall and Williams Corp., 46 Baker St., Providence, R. I.

T-503 **WATER ANALYSIS.** Includes tables, conversion factors, indicators, standard solutions. Solvay Process Div., Allied Chemical Corp., 61 Broadway, New York 6, N. Y.

T-504 **UREA FORMALDEHYDE.** Literature on urea formaldehyde or U.F. concentrate-85. Dept. CUFI-29-1, Nitrogen Div., Allied Chemical Corp., 40 Rector St., New York 6, New York.

T-506 **CATIONIC SURFACE ACTIVE AGENT.** Describes Uversoft "D." Harshaw Chemical Co., 1945 East 97th St., Cleveland 6, Ohio.

T-507 **CONTINUOUS STARCH COOKER.** Booklet shows how the use of continuous cookers for starch assures accurate control, economy, low maintenance in warp sizing and finishing Clinton Corn Processing Company, Clinton, Iowa.

MANN

SPINNING and TWISTING RINGS

- CASE HARDENED STEEL
- NITRIDED STEEL
- HIGH LUSTER FINISH
- SPECIALLY TREATED STEEL FOR RAPID BREAK-IN
- PLASTIC COATED FLANGE U.S. PATENT No. 2,729,053
- DOUBLE FLANGE REVERSIBLE
- SINGLE FLANGE COMMON SPINNING RINGS
- STRAIGHT WEB — CURVED WEB
- STANDARD — ANTI WEDGE PROFILE
- VERTICAL TWISTER RINGS
- PLAIN — GREASE GROOVE — LACED
- STANDARD — BACK SLOPE PROFILE

LENKOTEX COMPANY, INC.

136 LIBERTY ST. • NEW YORK 6, N. Y.

ATLANTIC CITY EXHIBITION — BOOTH 663

"What You Want When You Want It"

WONALANCET

PERUVIAN TANGUIS COTTON

WONALANCET COMPANY

3240 Peachtree Road, N. E., Atlanta, Georgia

and 128 Burke Street, Nashua, New Hampshire

let's talk about...

POLYLUBE FFN (SPECIAL)

Laurel's improved finishing agent

Now is the time to investigate POLYLUBE FFN (SPECIAL) . . . Laurel's improved white, non-ionically dispersed polyethylene emulsion. These advantages tell why this high activity emulsion is best for use in your plant:

. . . POLYLUBE FFN (SPECIAL'S) superior lubricating properties at high temperatures make it an ideal high-speed sewing lubricant.

. . . POLYLUBE FFN (SPECIAL) imparts a soft springy hand to piece goods — improves the drape as well as sewing and cutting properties.

. . . POLYLUBE FFN (SPECIAL), applied to resin-treated goods material increases both tear strength and crease resistance.

. . . POLYLUBE FFN (SPECIAL) is amine free to eliminate chlorine retention.

. . . POLYLUBE FFN (SPECIAL) is stable to acids, alkalies, salts and the newest catalysts, even in very high concentrations for extended periods of time.

Like to know more about this improved Laurel finishing agent? Write for complete details and a generous free sample.

Laurel Brand — OVER 50 YEARS OF SERVICE TO INDUSTRY

Laurel

SOAP MANUFACTURING CO., INC.

TIOGA, THOMPSON & ALMOND STS. • PHILA. 34, PA.

Warehouses: Paterson, N.J. Chattanooga, Tenn. Charlotte, N.C. Greenville, S.C.

BOOKLETS

T-508 PEROXIDE BLEACHING SYSTEM. Illustrates and describes this continuous system. E. I. du Pont de Nemours & Co., Electrochemical Dept., Wilmington, Del.

T-510 TEXTILE CHEMICALS. Describes leading products for wet processors. Royce Chemical Co., Carlton Hill, N. J.

T-512 DEPUMA. Describes odorless, viscous, non-evaporating emulsion for anti-foam. Koppers Co., Inc., Chemicals & Dyestuffs Div., Porter Bldg., Pittsburgh 19, Pa.

T-513 CATALYST AC-6. Tells how curing efficiency may be stepped up as much as 25%. Monsanto Chemical Co., Plastic Division, Springfield 2, Mass.

T-514 SODA ASH BULLETIN. Contains useful data covering this subject. Solvay Sales Division Allied Chemical Corp., 40 Rector St., New York 6, New York.

T-516 ALUMINUM CHELATE PEA-1. Technical data sheet tells how aluminum Chelate PEA-1 may be used with advantage in many applications where aluminum is proplate is unsatisfactory. Harshaw Chemical Co., 1945 East 97th St., Cleveland 6, Ohio.

T-517 CHEMICAL CATALOG. Lists products with chemical composition, properties and applications. Antara Chemicals Div., General Aniline & Film Corp., 435 Hudson St., New York 14, New York.

T-519 HYDRAULIC POWER UNITS. Describes unit for operating hydraulic textile machines. B. F. Perkins & Son, Inc., Holyoke, Mass.

T-522 CUT WATER TREATMENT COSTS. Describes the control of scale, slime, algae and corrosion. Oakite Products, Inc., 126C Rector St., New York 6, New York.

T-526 PRODUCTS FOR TEXTILE IMPROVEMENT. Describes products and services designed to provide better fabrics. B. F. Goodrich Chemical Co., 3135 Euclid Ave., Cleveland 15, Ohio.

T-527 SODIUM HYDROSULFITE. Literature and test samples are available on "T-C Hydro." Tennessee Corp., 617-629 Grant Bldg., Atlanta, Ga.

T-528 ETHANOLAMINES. Lists application, chemical and physical properties. Nitrogen Division, Allied Chemical Corp., 40 Rector St., New York 6, New York.

T-531 ROTARY DYEING MACHINE For use in dyeing hosiery, hats, gloves, socks, etc. Turbo Machine Co., Lansdale, Pa.

T-534 DYEING AND FINISHING MACHINERY. Complete line presented in series of catalogs. Birch Brothers, Inc., 32 Kent St., Somerville 43, Mass.

T-535 DYEING, BLEACHING AND DRYING EQUIPMENT. Complete line for cotton, wool and synthetics described. Color pictures. Morton Machine Works, 1718 3rd Ave., Columbus, Ga.

T-536 NAPTHOL RATIOS SLIDE CHART. Quickly and accurately enables operators to determine Napthol Ratios. Alliance Color & Chemical Co., 33 Ave. P, Newark 5, New Jersey.

T-540 PENFORD FINISHING GUMS. Complete data, including physical properties. Penick & Ford Ltd., Inc., 750 Third Ave., New York 17, New York.

T-541 REGENERATION OF ZEOLITE WATER SOFTENERS. Explains advantages of Lixate Process. International Salt Co., Scranton, Pennsylvania.

T-542 DYEING SYNTHETIC FIBERS. Detailed analysis of methods and materials. General Dyestuff Co., 435 Hudson St., New York 14, New York.

T-543 INDUSTRIAL BRUSHES. Features use on shears, printing machines. M. W. Jenkins' Sons, Inc., 444 Pompton Ave., Cedar Grove, N. J.

T-544 WASTE HEAT RECOVERY. Describes system of waste heat recovery from polluted water. Ludell Mfg. Company, 5200 West State Street, Milwaukee, Wis.

T-545 WASHERS FOR SCOURING, BLEACHING, ACIDIFYING. Describes high capacity, continuous process washers. C. G. Sargent's Sons Corp., Graniteville, Mass.

T-546 NAPHTHOL FOR LIGHTFAST BROWNS. Booklet describes new, straight, non-substantive naphthol. Naphthol As-BN, for the continuous naphtholation of cotton and rayon piece goods in the dyeing of economical, fast-to-light browns. General Dyestuff Co., 435 Hudson St., New York 14, New York.

T-547 SOFTENER LUBRICANT, NAPPING AID. Technical information available on softener, lubricant and napping aid for natural and synthetic fibers, yarns and fabrics. Nopco Chemical Co., Harrison, N. J.

T-548 HANDBOOK ON METHOCEL. Gives technical information and use data on family of methylecellulose ethers called Methocel. Organic Chemicals Sales, The Dow Chemical Co., Midland, Mich.

T-549 WALL CHARTS FOR HANDLING, TESTING H_2O_2. Two 16" x 21" wall charts available, one on handling and the other on testing H_2O_2. Becco Chemical Div., Food Machinery & Chemical Corp., Buffalo 7, N. Y.

T-550 POLYVINYL ACETATE EMULSION. Bulletin contains a description of Celanese emulsions and cites advantages of Celanese polyvinyl acetate emulsions in textile finishing. Celanese Corp. of America, Plastics Div., 744 Broad St., Newark 2, N. J.

T-554 INSTRUMENT CATALOG. Complete information on industrial instrument accessories and supplies. Includes specifications, parts numbers and prices. Catalog 500, Foxboro Co., Foxboro, Mass.

T-556 HUNTER DYEING EQUIPMENT. Describes fully with diagrams Hunter Model A Dye Becks, Hunter No/Lap Reels, Model S Dye Kettles, Open Width Dye Kettles, Sample Dye Kettles. James Hunter Machine Co., North Adams, Mass.

T-557 HIGH ACTIVITY CATALYST. Technical bulletin describes new catalyst AC-6 which provides increased activity, excellent bath life, minimum odor formation, etc. Monsanto Chemical Co., Plastics Div., Springfield, Mass.

T-558 CATIONIC DYE LEVELER. Bulletin TX-34 gives new information on dye leveler for acid colors on nylon tricot and wool through use of Nopco 1425-B. Nopco Chemical Co., Textile Chemicals Div., Harrison, N. J.

T-559 FLOW CONTROL Complete information on largest selection of values to handle flow control requirements. William Powell Co., 2525 Spring Grove Ave., Cincinnati 22, Ohio.

T-561 PUMP POURABLE PASTES. Bulletin tells how Moyno pumps can pump any textile liquid that can be forced through a pipe, even if highly viscous or corrosive. Robbins & Myers, Inc., Springfield, Ohio.

T-563 POLYETHYLENE FINISHING AGENT. Booklet contains information needed to adopt Emulsifiable A-C polyethylene as a finishing agent to any particular process. Semet-Solvay Petrochemical Div., Allied Chemical Corp., 5th Floor T, Rector Street, New York 6, N. Y.

T-564 HYDROGEN PEROXIDE BLEACHING. Booklet discusses advantages, operating details and savings in chemical costs of Activated Hydrogen Peroxide Bleaching Process for Cotton Solvay Process Div., Allied Chemical Corp., 61 Broadway, New York 6, N. Y.

T-566 ETHYLEX GUMS. Brochure describes properties of hydroxy ethyl ether derivatives of corn starch. Applications of these noncongealing gums in warp sizing and finishing covered. A. E. Staley Mfg. Co., Box 151 Decatur, Ill.

T-570 CARPET DRYERS. Details, pictures, drawings on driven roll, conveyor, and tenter types. Andrews and Goodrich Div., 336 Adams St., Boston Dorchester, Mass.

T-572 DYEING MACHINERY FOR EVERY PURPOSE. Illustrated literature available on complete line of automatically controlled machinery. Gaston County Dyeing Machine Co., Stanley, N. C.

T-576 YARN PREPARATION. Describes products for yarn preparation, printing, finishing. Polymer Industries, Springdale, Conn.

T-577 STAINLESS DRY CANS. Information on stainless steel, 75 psi, reverse dished, head dry cans. Can be furnished Teflon-coated if desired. Sims Metal Works, West Point, Ga.

T-579 AUTOMATIC GUIDING EQUIPMENT. Catalog shows various types of automatic guiding equipment for accurate cloth guiding. Fife Mfg. Co., Inc., P. O. Box 9815, Oklahoma City, Okla.

fibers and yarns

T-601 FORTISAN-36, NEW TEXTILE FIBER. Includes charts, diagrams, text, presents technical properties. Textile Sales Dept., Celanese Corp. of America, P. O. Box 1414, Charlotte, N. C.

T-602 CAPROLAN NYLON HEAVY YARNS. Describes strength, long flex life and ready dyeability. Fiber Sales Dept., National Aniline Div., 261 Madison Ave., New York 16, N. Y.

T-603 RAYON—MILE BY MILE. Details on how rayon is produced mile by mile, perfect inch by inch. Industrial Rayon Corp., 500 Fifth Avenue, New York 18, N. Y.

T-604 THE CHEMSTRAND NYLON Story. Describes the birth and growth of Chemstrand Nylon. Chemstrand Corp., 350 Fifth Ave., New York 1, N. Y.

T-605 COLOR-FAST FIBERS. Further information on "Coloray." Courtauld's solution dyed rayon staple which is a contribution to color fastness in fabrics. Courtaulds (Alabama) Inc., 600 Fifth Ave., New York 20, N. Y.

T-606 "DIAL-A-FIBER" Ingenious circular chart indicates properties and compatabilities of "Uvitex" for application on natural and synthetic fibers. Ciba Co., Inc., Route 208, Fair Lawn. New Jersey.

T-607 THE STORY ON LUREX. Information on metallic yarns and how they are developed to broaden the scope of the weaving, knitting, braiding, tufting, embroidery, lace, quilting and wet processing industries. Specify interest. Textile Fibers Department. Product Information Service, The Dow Chemical Company, Williamsburg, Virginia.

WHITINSVILLE, MASS.

H.J. THEILER CORPORATION

SPARTANBURG, S. C.

Ruti Machinery Works, Ltd.	Looms, Sizing Machy.
Benninger Eng. Co., Ltd.	Sectional Warper and Beamer
Staubli Bros., & Co., Ltd.	Dobby Heads
Loepfe Bros., Ltd.	Optical Electronic Feeler
Schweiter, Ltd.	Winding Machinery

Before you buy Dobbies compare with the best!

Staubli Dobbies

We guarantee best performance on all types of looms, lowest maintenance! "No risk" trial installation. All our customers reorder!

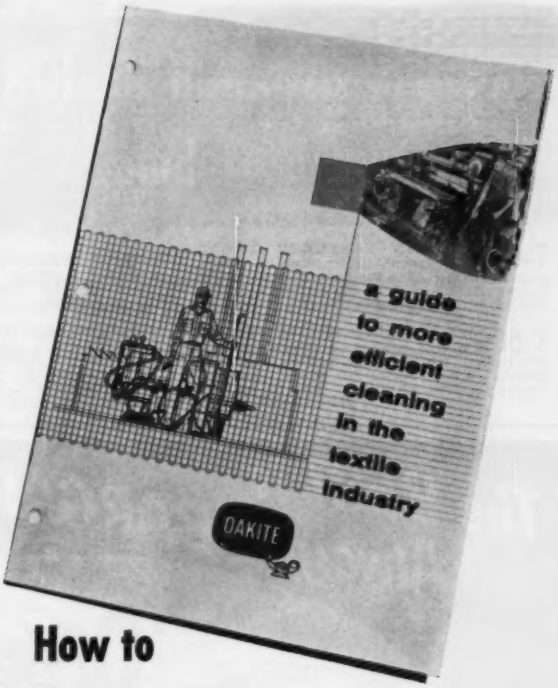
Please request complete information.

NEW "LIGHTWEIGHT" PERALTA® MACHINE

with
Off-set Roll Arrangement
Doffing Device Attachment
Hydraulic Pressure

Write for information.

Duesberg-Bosson of America, Inc.
Main Street Jefferson, Mass. P.O. Box 25



How to cut your costs on "repeat" clean-up jobs

Send for this FREE bulletin containing a wealth of money-saving information

Oakite has worked with the textile industry for more than 50 years, and here is the result:

Here's a bulletin that covers every phase of mill maintenance ...from cleaning spinning frames to washing floors... to stripping and preventing rust.

In words and pictures, here are the facts on Oakite "job-matched" methods ... modern ways that slash through cleaning time and toil... give you top-notch cleaning efficiency.

For your FREE copy of this fact-filled bulletin, drop a post-card to Oakite Products, Inc., 26C Rector Street, New York 6, N. Y.

17 KEY JOBS

How to clean:

- looms
- spinning frames
- knitting machines
- floors
- reeds
- heddles
- harnesses
- drop wires
- air conditioners
- humidifiers
- Jaquard loom heads
- knitting machine heads
- slasher drums
- dye kettles
- bobbins
- spools
- tenter chains

OAKITE
over 50 Est. 1909 SCIENCE
years' leadership in industrial cleaning

BOOKLETS

T-608 TASLAN TEXTURED YARNS. Technical information on dyeing and finishing of new fabrics made with Taslan. E. I. du Pont de Nemours & Co., Wilmington 98, Delaware.

T-609 PROCESSING NYLON STAPLE, Data sheet describes method of processing Du Pont 42 Nylon Staple in blends with cotton. Covers complete operation through sizing. Bulletin N-93, E. I. du Pont de Nemours & Co., Inc. Wilmington, Del.

laboratory

T-701 TESTING INSTRUMENTS. Descriptions of 37 instruments for testing textiles. Custom Scientific Instruments, Inc., 541 Devon St., Kearny, N. J.

T-703 SHADOGRAPH WEIGHING DEVICES. Pictures and information on various types of scales. Exact Weight Scale Co., Columbus 8, Ohio.

T-705 STROBOTAC. Measures speed of rotating, reciprocating or other cyclic motions. General Radio Co., West Concord, Mass.

T-706 YARN COUNT SCALE. Data sheet tells how direct-reading instrument provides fast, accurate method of determining yarn number. Exact Weight Scale Co., Columbus 8, Ohio.

T-712 AUTOMATIC MOISTURE CONTROL. Booklet tells how Hunter Electro-Psychrometers are used in measuring percentage of moisture in all classes of textiles, whether yarns or fabrics. Hunter Controls, Inc., Div., James Hunter Machine Co., North Adams, Mass.

services for management

T-801 FACTORING SERVICE. Details on advantages of factoring, including information on general banking and pension plans. Trust Company of Georgia, Atlanta, Ga.

T-802 NON-WOVEN FABRICS. Report includes how non-woven fabrics are made, machinery involved, sample fabrics. Textile Fibers Dept., E. J. du-Pont de Nemours & Co., Inc., Wilmington 98, Del.

T-805 PROFIT THROUGH FACTORING. Brochure gives facts on the use of factoring as a modern plan for developing sound business growth and added profits. Walter E. Heller & Co., Dept. TI-2, 105 W. Adams St., Chicago 99, Ill.

T-807 GROUP INSURANCE. Information on how textile group insurance can insure the happiness of your employees and make for a better running mill. Provident Life and Accident Insurance Co., Group Dept., Chattanooga, Tenn.

T-808 FACTORING. Complete details on services offered as mill factors. L. F. Dommerich, 271 Madison Ave., New York, N. Y.

T-810 THE WONALANCET WAY is the title of an editorial booklet published five times a year dealing with current problems. Write Wonalancet Company, 128 Burke St., Nashua, N. H.

T-812 BEECHCRAFTS FOR 1960. Booklet available from Southern Airways Company shows how Beechcraft executive airplanes can save executives time and money. Write Southern Airways Co., P. O. Box 718, Atlanta, Ga.

T-819 ORGANIZED LUBRICATION PAYS. Planning book entitled "Management Practices that Control Costs via Organized Lubrication" shows how to effect savings in five areas of plant operation. Available from Texaco, Inc., 135 E. 42nd St., New York 17, N. Y.

T-821 INVENTORY CONTROL. How a daily report of inventory condition mechanically producted on existing business machines showed a net direct payroll saving of more than 10,000 a year. Administrative Methods Dept., Werner Textile Consultants, 1430 Broadway, New York, N. Y.

plant operation

T-902 BELT LACING EQUIPMENT. Includes prices, specifications, etc. Clipper Belt Lacer Co., Grand Rapids, Michigan.

T-903 "MOTOR SELECTOR." How to select a-c motors for specific application. Bulletin B-2103. Reliance Electric & Engineering Co., 24701 Euclid Ave., Cleveland 17, Ohio.

T-904 GEARMOTORS, MOTORGEARS, AND FLUID DRIVES. Catalog supplies complete information on double, triple, and quardruple reduction gearmotors and motorgears. Electrofluid and fluid drives are also explained. Link-Belt Company, Dept. PR, Prudential Plaza, Chicago 1, Illinois.

T-907 WRAP UP LINT PROBLEMS. Automatic lint filter removes lint from air, winds it into disposable roll. Bulletin 234, American Air Filter Co., 275 Central Ave., Louisville 8, Ky.

T-908 TEXTILE MOTORS. Bulletin describes compete line of textile motors. Diehl Mfg. Co., Finderne Plant, Somerville, N. J.

For a long-wearing doffing basket to fit the individual requirements of your mill insist on the Lane Style 20. The tough, snag-proof body, built over a strong, resilient frame, gives low-cost, dependable service because of these exclusive Lane features:

- Light, strong frame of special spring steel provides resistance to permanent bending.
- Longitudinal frames are embedded full length in cross-braced shoes of close-grain hard wood.
- Lane duck, woven to exacting requirements is sewn into tough body with completely smooth inside surfaces.
- Specially tanned binding leather and short, tight stitches of long-staple cotton thread for extra wear. 1111A

To be SURE of the best,
INSIST ON *LANE Style 20 Canvas Doffing Basket*

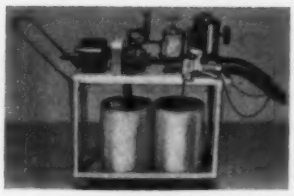
SEE US AT BOOTH 387
ATMA SHOW

Lane

THE LANE BASKET

W. T. LANE & BROS., INC. Poughkeepsie, New York

CHOOSE and the WICACO ROLLER BEARING SPINDLES Spindle Oiling Machine



The new improved Wicaco Spindle Oiling Machine has many new features required by present day mills — including low cost. Smaller than previous models, and lighter, it provides greater flexibility and efficiency. Economical to use, with lower first cost, the new style, improved filter system cleans old oil for re-use and longer life, and it operates with as little as one gallon of oil. A new filter gauge tells when filters need changing, and a relief valve permits full control of pressure from 0 to 35 lbs. Order one today and see how it will improve your maintenance operation.

SINCE 1868

Since 1935, when Wicaco Machine Corporation first introduced Roller Bearing Spindles to the textile mills, Wicaco Roller Bearing Spindles have been preferred by most mills because of their dependability and long, trouble-free life.

Wicaco Roller Bearing Spindles cost no more than ordinary spindles, yet they reduce operating costs and increase the users' profits. It takes less power to run them, and they increase production.

Replace your present spindles, regardless of type, with more efficient Wicaco Roller Bearing Spindles, and start counting your increased profits. We will design them to meet your particular requirements. Write today for quotations.

WICACO MACHINE CORPORATION

4800 STENTON AVENUE

WAYNE JUNCTION PHILADELPHIA 44, PA.

MAKE IT A HABIT! !

Management and operating executives of textile manufacturing plants should make it a habit to read the Executive Section in each regular issue of "Textile Industries." It contains

NEWS IN BRIEF

★

LABOR-MANAGEMENT NEWS

★

MERCHANDISING NOTES

★

RECENT TECHNICAL AND COMMERCIAL DEVELOPMENTS

★

EXECUTIVE VIEWS

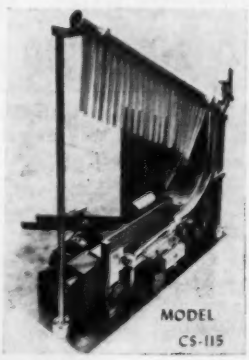
★

FUTURE EVENTS

★

You'll find this section at the same place each month — on the buff-colored pages just ahead of the features.

THE QUIL-CHEK

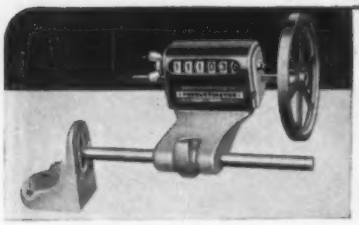


TO BE INTRODUCED AT THE AMERICAN TEXTILE MACHINERY EXHIBITION

Atlantic City, N. J.
May 23-27, 1960
BOOTH-476

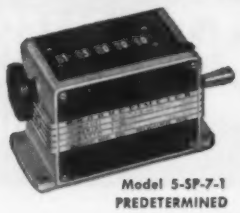
This unit was developed by the West Point Mfg. Co. for automatically passing or rejecting quills based on the quills runout and the setting of the unit. Range of quills-7 3/8" to 9½" in length. Rate of speed-60 quills/minute.

CUSTOM SCIENTIFIC INSTRUMENTS, INC.
541 Devon St. Kearny, N.J.
WYman 1-6403

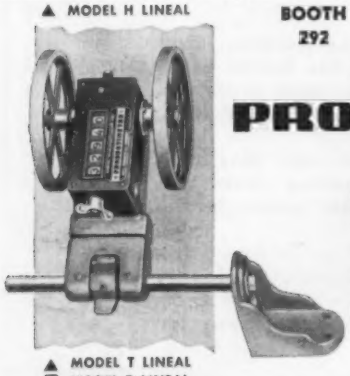


▲ MODEL H LINEAL

BOOTH 292



Model 5-SP-7-1
PREDETERMINED



An ACCURATE, DEPENDABLE

PRODUCTIMETER

for every type of...

TEXTILE JOB

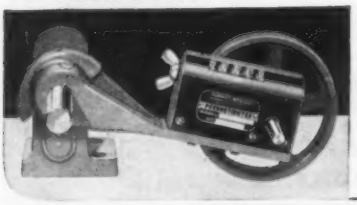
Send for descriptive literature

DURANT MANUFACTURING CO.

1973 N. Buffum St. Milwaukee 1, Wis.
73 Thurbers Ave. Providence 5, R. I.

Representatives in Principal Cities

▲ MODEL T LINEAL
▼ MODEL D LINEAL



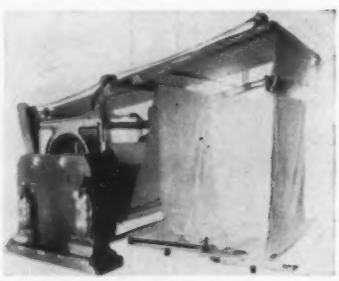
Model 5-H-7-1-R
END DRIVE ROTARY

Another Outstanding Development By The Woonsocket Napping Machinery Company Should be seen in Booths 1052, 1053 and 1105, 1106 — A.T.M.A. Exhibition, Atlantic City — May 23-27.

MODEL #1035, 20-ROLL, HIGH-SPEED KNIT GOODS NAPPING MACHINE

Designed for napping all types of synthetic pile linings, floor coverings and crib blankets as well as tubular fabrics made from synthetics, cotton or wool.

This machine has many features not previously incorporated in a knit goods napping machine such as geared driven ball bearing napper rolls, ball bearing carrier rolls, P.I.V. controls for napping energy, variable cloth speed driven by a P.I.V. with a range from 10 to 35 yards per minute over the cylinder.



An important feature is a variable speed feed roll also controlled by a P.I.V. which governs the tension of the cloth on the machine as well as driving a spreader roll that is invaluable for the edges on split fabrics which are inclined to roll.

WOONSOCKET NAPPING MACHINERY CO.

WOONSOCKET RHODE ISLAND

Clothing cards

(from page 191)

this can be ascertained at a moment's notice by referring to the ledger. At the same time, if desired, aprons and tapes of all types on the card can be listed.

CLOTHING IMPROVEMENTS

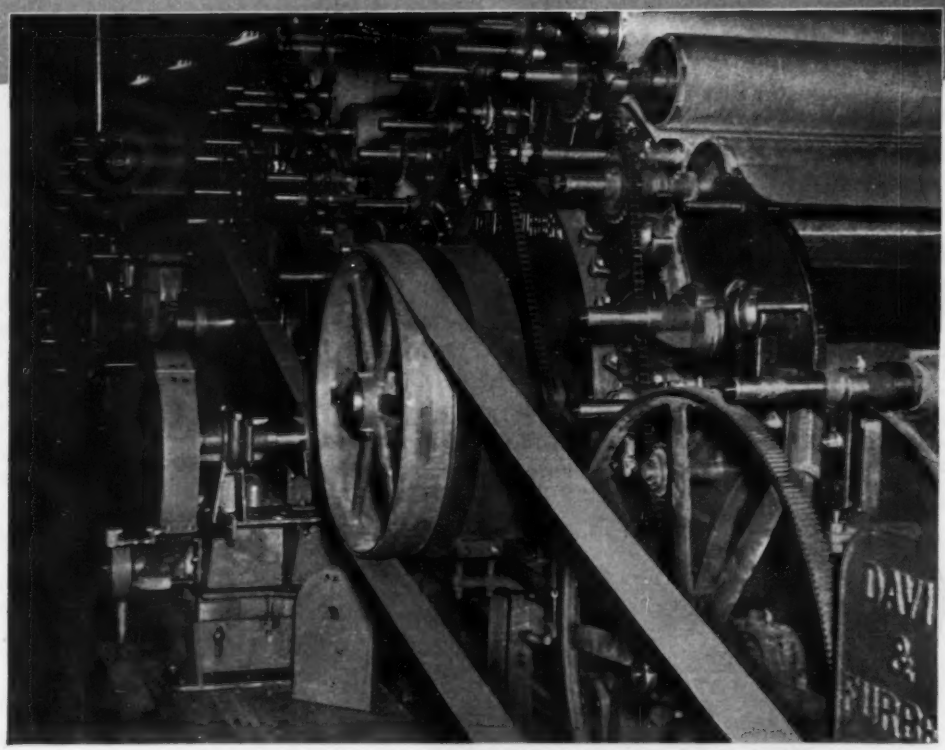
Over the years clothing has been improved continually, and today's tempered steel wire is a great improvement over the soft wire set in the leather foundation of 60 years ago. Card clothing manufacturers have met the challenge of changing conditions by using improved steel wire, and foundations of various types, to suit the greater varieties of stocks incorporated in modern woolen and synthetic blends. They are continually experimenting with tougher steel wire and stronger foundations.

One of the later improvements is a burr-proof clothing for the first breaker—a must in woolen carding since the burr crushing rolls came into general use. Now, nearly all blends containing a large percentage of wool are delivered to the card with many hard burrs and other vegetable matter in the stock. Consequently, the first breaker clothing at least must be strong, yet very resilient, to withstand the shock of handling burry blends.

A number of years ago a napper-style wire set in a light flexifort foundation was introduced for use on all carrier rolls such as tumblers and strippers. Hard-to-reach tumblers will run six months or more without stripping; and, because of the sharp pitch of this wire, less fiber is dropped than is the case with wire of standard pitch such as is used on cylinders, doffers, and workers. It is best to use a No. 28 or 26 wire set in regular flexifort foundation. Lighter wire will not stand the shock of woolen carding.

This wire is often used on the first two workers of the first breaker and is very effective for breaking and leveling off lumps of stock. When used on workers, the settings to the cylinder must

More Power to the Textile Industry



Rhoads belting gives efficient, economical performance on carding machine.

In the Textile Industry, where machine performance so often depends on smooth-running, long lasting belts — lickerin, doffer, gainer, stripper, etc., — Rhoads stands out for performance and economy.

At Rhoads, there is a flat belt that is exactly right for your operating conditions — economical in original cost and in operating cost, shock absorbing, highly efficient in speed reduction, safe, long-lasting.

Rhoads recommends the belting that is engineered to meet your needs — famous Tannate leather belting, new Texalon nylon core synthetic belting, new Tanastic nylon core leather belting. For quotations or for literature on belting or leather check straps, address: Engineering Department,

J. E. RHOADS & SONS
Wilmington 99, Delaware

RHOADS

Established 1702 . . . Pioneers in Mechanical Power Transmission

You Are Sure of Trouble Free Compressed Air...with an Adams Aftercooler and Cyclone Separator

Are you really operating your compressed air equipment with clean, dry air . . . or with air laden with oil and water and other trouble causing impurities? Tool malfunction, production down time, off grade work almost always can be traced to dirty, contaminated air. Compressors are designed only to bring ambient air to operating pressure. This air is saturated with moisture and oil vapor which must be removed to guarantee maximum production efficiency.

An Adams Aftercooler with its exclusive Cyclone Separator, is specifically designed to remove unwanted water and oil from your compressed air. A standard Adams unit cools the compressed air to within 10° of the cooling water temperature for the condensation of oil and water vapor. The Adams scientifically designed Cyclone Separator then removes this condensed "trouble source" over the entire range of operating capacity. Thus, only clean, dry air is provided to your compressed air system. Production cycles are extended, maintenance costs reduced, down time eliminated.

Why not investigate the advantages of an R. P. Adams Aftercooler and Cyclone Separator in your compressed air system. Write today for your copy of Bulletin 714.

R. P. ADAMS CO., INC.
216 East Park Drive, Buffalo 17, New York

BROOK A. C. MOTORS get the most from machines

Plenty of power when your machine is driven by Brook. Maintenance costs are low. No wonder, because there is no finer electric motor built. Yet, BROOK MOTORS COST LESS. They have proven themselves in factories, mills and mines, powering all types of machines, compressors, pumps, blowers and conveyors. Motor shown powers a pharmaceutical homogenizer. All standard enclosures. 1 to 600 H.P.

Warehouses, factory representatives and dealers coast-to-coast and in Hawaii. Send for literature.

Since 1904

world's most respected motor

BROOK MOTOR CORPORATION
3302 W. PETERSON AVE., CHICAGO 45, ILL.

Represented By: W. G. Baynard, 1811 Sterling Road, Charlotte 9, North Carolina; J. W. Vanderpool, Box 437, Lewiston, Maine; Weeks and Company 229 Harvard, Brookline 46, Massachusetts; and Other Representatives in Textile Areas.

BROOK MOTOR CORPORATION

be very open and not any closer than 1/16". If a No. 16 card gauge is not available, use a strip of No. 16 gauge sheet iron.

Even with this open setting, this sharp-pitched wire will catch more of the stock than a worker clothed with new standard pitch wire and set close to cylinder. Many carders like to use this wire on the first two workers of the first cylinder of the double finisher.

Because the strands of the web are laid parallel to the feed rolls on the broad band feed table, the leader or licker-in has a tendency to lick the web over in streaks. And the first two workers clothed with sharp pitched wire level off the streaks more effectively than workers with standard pitch wire.

Long ago in the early days of machine carding, the standard pitch of modern clothing was found to be the most practical, since with this pitch the points of the wire do not rise above the surface when hit by the stock such as worker wire facing point against point to the cylinder. Sharp pitch wire is useful for carrier rolls, but if hit a hard blow against the points the wire becomes bent and some of the points stick up above the surface, causing the surface of the roll to be rough. This is the reason for an open 16-gauge setting when this wire is used on the first two workers of a cylinder.

Examine New Clothing Carefully. All new clothing such as is used on cylinders, doffers, and workers, looks very much alike if given a casual examination. But despite a careful factory inspection, inferior clothing will occasionally be delivered.

The foundation should be firm, yet resilient—never limp and spongy, as a spongy foundation will not support or hold the wire firmly. Deterioration will be more rapid since the wire will soon become uneven in pitch and unsatisfactory for the making of quality yarns.

While it is not practical to inspect several hundred feet of clothing inch by inch, an inspection of a few feet of each shipment on arrival at the mill may spot a defective roll of card wire

MAKE YOUR BALING A *Profitable* OPERATION

with dependable

LOGEMANN BALING PRESSES

Open balers for finished goods may be hydraulic or power-driven. Give platen dimensions required, maximum height of pile to be compressed, number of bales per hour, when requesting information on open balers.

Tell Us Your Baling Problems

That's the best way to get the right answers to low-cost time-saving baling. During our sixty years of building balers for the textile industry we've solved many a baling problem for mill owners. Our engineers know how to make baling operations pay their own way in time and labor-savings, in speedier, more reliable handling of bales, in lower maintenance cost. Many Logemann balers have been in profitable operation since the turn of the century—evidence of the ruggedness, durability, and long service life of Logemann baling presses.

In the interests of better baling operations in your plant, find out what Logemann balers can do for you. Tell us what your specific problem is. We'll gladly show you how it can be answered in terms of better bales at lower costs and make a specific recommendation based on your requirements. Write for information today.

Box balers for waste may be obtained in either the hydraulic or power-driven type. Mention the kind of waste to be baled, how much in how many hours, the preferred size or weight of bale when inquiring about box balers.

LOGEMANN BROTHERS CO.

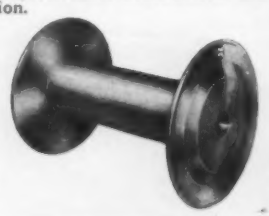
3102 West Burleigh Street • • • Milwaukee 10, Wisconsin

Call MILTON for dependable BEAMS

FORGED HEAD
ALUMINUM ALLOY
TRICOT & RASCHEL BEAMS

RUGGED in design . . . light in weight, with the big bonus of SUPER STRENGTH—for dependable service with nylon, rubber, acetate, rayon and other yarns.

13¾", 21" and 30" diameter forged, heat-treated aluminum alloy heads and extra heavy wall barrels become a one-piece beam by Milton's continuous weld process. Here is true dimensional stability without objectionable deflection or distortion.



STEEL BARREL
WARP BEAMS
for BROAD, NARROW FABRIC, RIBBON, VELVET AND CARPET LOOMS

BROADLOOM BEAMS

for C & K and Draper Looms

Shown above is Milton's stud construction (also made with cast iron hubs).

RIBBON LOOM BEAMS

Adjustable head with fixed shaft, or fixed head with removable shaft.

See Them . . . Booth 386

MILTON MACHINE WORKS
INCORPORATED
DESIGNERS • ENGINEERS • MANUFACTURERS
MILTON • PENNA.

before it is applied to the card. Test the foundation for firmness and resiliency by flexing a short length to see if it will spring back when flexed.

Card wire has twilled lines both ways across the fillet, and by sighting across the points of the wire in line with the twill one can see if the lines are straight, indicating a uniform pitch. Sight along the strip of clothing lengthwise to make sure the points form parallel straight lines.

See that all wire is set firmly in the foundation, since if it is the least bit loose the wire will soon lose its pitch when put in service. The surface of the wire should have a smooth, glassy feel when finger tips are passed lightly over the backs of the points. If it has a sandy feel, this may indicate uneven pitch which no amount of grinding will correct.

Some General Recommendations. The average woolen card room is called upon to handle a wide variety of fibers—some that card out quite easily and others like fine wools that may contain pilled fibers that need close carding to comb out and eliminate the pills or specks. A standard No. 34 wire set in a 5-ply fillet with 18 noggs per inch contains 62,208 points per square foot and by adding one nogg per inch this number is increased to 65,664 points. If the cylinders, doffers, and workers on the double finisher are covered with this closer set wire the extra points per square foot will be more effective in carding out pills and specks.

However, fine wool fiber clings more tenaciously to the card wire than the coarser, straighter fibers and since the fine fiber will cling tighter to close set wire, a more vigorous fancy action is needed to clear the cylinders. I find a No. 28 or 26 wire 1½ inches long straight tooth set in a double leather foundation 3-3-4 or 3-3-5 to be best for all types of fibers and all cylinders regardless of the size of the cylinder wire.

The heavier wire is livelier with a sharper, stronger spring action that gets the embedded web out of the cylinder wire. If on coarse blends there is too much flyings, reduce the fancy speed and use an open set wire 3-3-3. The No. 28 wire is the most used as of today and can be run at lower speeds with good results. The fine wire fancy went out with sheet clothing cylinders many years ago.

While being more easily carded, fine synthetics have even greater tenacity than fine wools; hence if carding these fibers in any great amounts, a more open set wire is best on the two finisher cylinders at least—for instance, a No. 32 wire set 30 in a proper foundation. This more open set wire will not hold the fiber quite as much as a standard setting, making the work of the fancy much easier in raising the web off the points of the cylinder wire.

Some Sources of Clothing Abuse. Harsh grinding, or holding the grinding period longer than necessary, will hasten depreciation by loosening the set of the wire in the foundation. Setting the workers and doffers close to the cylinder naturally places more strain on the wire and is another cause of premature depreciation.

Then there is the rare case of a dry bearing cutting down, causing two or more rolls to contact. A cylinder bearing wearing down will, in severe cases, damage both the cylinder and doffer clothing enough to render it unfit for further service.

There are those who claim that cylinder clothing, running as it does with the points aimed towards the suction spout, is damaged by vacuum stripping. This is quite true if strippings roll up in a hard knot between spout and cylinder. If the spout is set with proper clearance and the vacuum is kept strong, there should be no damage to the finest of wire. Using too many spouts at one time reduces the vacuum suction.

Felt-faced and felt-neoprene clothing for cylinders and doffers was designed to save waste made by stock packing into the regular conventional wire in the form of strippings. This makes for less stripping and a resulting labor saving. This foundation has become quite popular, particularly with the carpet yarn plants.

For many years I used No.

LOW COST TROUBLE-FREE OPERATION
...EASY INSTALLATION

New ALLEN PACKAGE DESIGN KIERS

For boiling or bleaching all types of cotton goods from gauze to heavy twills, these new ALLEN stainless steel Package Design kiers offer unusual opportunities for more profitable operation to small and medium sized bleacheries and those doing fine fabrics. Large plants, too, find them extremely useful for short runs and special fabrics. In many cases, they are replacing continuous bleaching operations for certain types of goods. Allen Package Design Kiers feature:

- **A completely prefabricated unit — pump and heater are integral parts of the kier — for easier installation and maintenance.**
- **Smooth, stainless steel interiors eliminate rub, rust and stain marks.**

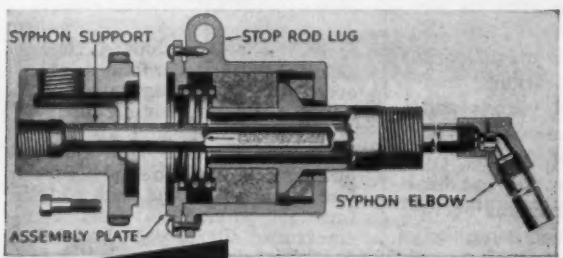
Write today for circulars giving complete information on this as well as Allen kiers for knit goods and kiers for cotton and cotton batting.

William Allen Son's Company
SHREWSBURY • MASSACHUSETTS

A Division of O. G. KELLEY & COMPANY, Boston 22, Mass.

TRY THIS on your Dry Cans and 30" Slasher Cylinders

We'll gladly furnish a pair of these units for 90-day obligation-free trial in your mill. The Type SB2P is self-supporting, completely packless, needs no lubrication or adjustment. The Johnson Syphon Elbow permits the use of two straight pipes instead of an unwieldy curved syphon pipe, is hinged to pass right through the joint.



Johnson ROTARY PRESSURE Joints
First in the Textile Industry

Write for Catalog S-3002

Shows self-supporting Johnson Joints for all needs . . . on print cans, calenders, compressive shrinkage ranges, big 5' and 7' cotton slashers, dry cans, etc.

THE JOHNSON CORPORATION
815 Wood St., Three Rivers, Mich.

MAYER TOURO—STROB

ELECTRO OPTICAL STROBOSCOPIC TACHOMETER & OBSERVATION INSTRUMENT

used for:

measuring and controlling spindle speed
studying operation of ring travelers, bobbins, spindle tapes, weaving looms, combing machines, printing machines, knitting machines, winders
observing thread balloons and all rapidly moving machine parts

IN SLOW MOTION
DIRECT SPEED READING FROM CALIBRATED DIAL
200 — 16,000 RPM
accuracy: ±1% of scale reading

POWERFUL LIGHT BEAM FOR OBSERVATION IN BRIGHT DAYLIGHT

PACKAGE SIZE — HANDY — LIGHT WEIGHT (4 lbs.)

LENKOTEX COMPANY, INC.
136 Liberty St. • New York 6, N. Y.
ATLANTIC CITY EXHIBITION — BOOTH 663

You'll be most welcome at the

ABINGTON

exhibit, A.T.M.A. exposition

Inspect the new **cardpen**

. . . which replaces calendar rolls and increases cotton card production up to 20% without loss of quality.

ABINGTON TEXTILE MACHINERY WORKS

Plant:
North Abington, Mass.

Southern Sales Office:
Calhoun Towers
Greenville, South Carolina

Executive Offices:
19 Congress Street
Boston, Massachusetts

24/28 wire 7-ply felt-faced, stitched with a rubber insert on some first breaker cards handling very rough blends containing hard burrs and all sorts of trash. This clothing withstood the severe beating for four years on a three-shift basis, whereas regular clothing without the rubber ply and felt face stood up only a few months.

Saaba yarn

(from page 193)

smooth textured fabrics. Negative overfeeds, i.e., when the top feed roll revolves slower than the bottom one, thus stretching the yarn, result in a crepy or bouclé fabric texture. In the positive overfeed range of the machine a few different combinations of overfeed and heater temperature will produce appreciably the same fabric results.

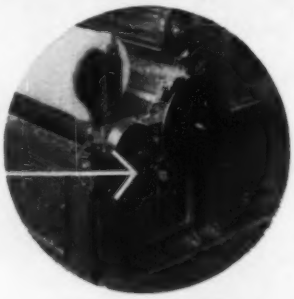
Saaba Method Versatile. Thus it can be seen that very many different types of Saaba yarn can be made, i.e., yarn can be made expressly for a single application so that an optimum fabric or garment will result. It is for this reason that those who use Saaba should experiment with at least two different types before actually choosing a yarn for the application. If either yarn is not satisfactory, and if an evaluation can be obtained from the samples, then the yarn can be further modified to better suit the application.

The original stretch yarn is made in a manner which causes the yarn to have an inherent torque. This torque is decreased somewhat during the secondary or Saaba operation. It is not, however, completely eliminated in this operation. It can be further reduced and even eliminated by twisting in the proper direction. This twisting decreases the final bulk of the yarn, which is not detrimental in some applications. Generally this torque is eliminated by plying a number of ends of opposite torque which cancel one another.

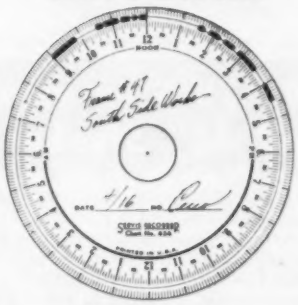
Because of the very accurate manner in which both the stretch and Saaba yarns are made, the re-

HERE'S A TIME CLOCK

LOOMS AND CARDS



CAN PUNCH!



Charts like this tell
Production Time, Down Time

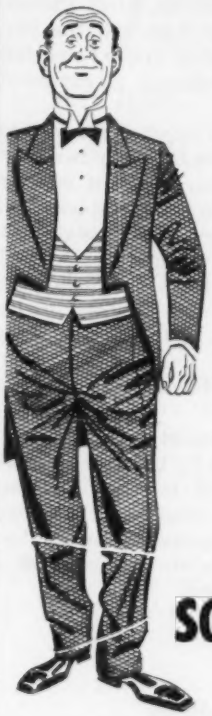
Only it's better than a time clock! Servis Recorders reveal every minute of busy time and down time of looms, cards, finishers, slashers and knitting machines. Circular charts are automatically recorded with fine lines for down time and wide lines for productive time. By comparing charts you can pinpoint inefficiency, plan schedules, increase production.

WITH
SERVIS RECORDER
you know exactly how much work you get from every machine.

Write for full information

The SERVICE RECORDER Co.
1015E Rockwell Ave., Cleveland 14, Ohio

AT YOUR SERVICE!



And we don't mean just *lip service*, either!

Your Southern Sizing Representative has a genuine interest in keeping your mill running well. He should . . . whether he eats or not depends on it!

Service Sells Size and Southern Sizing Salesmen Sell Service . . . AND good old Southern Size.

★

SOUTHERN SIZING COMPANY
EASTPOINT, GA.

got a
SPRAY NOZZLE
problem?

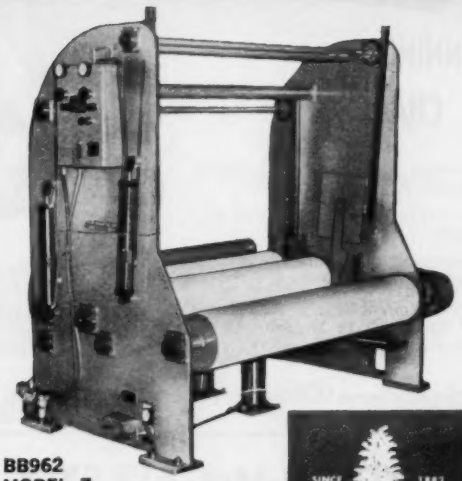
perhaps one of our **DATA SHEETS** *can suggest a solution*

For almost every spraying application, there's a Spraying Systems Data Sheet that gives useful information on suggested installations and types of nozzles to use. If you have a problem, write and let us know the application involved . . . and we'll send the Data Sheet that applies.

SPRAYING SYSTEMS CO.
3272 RANDOLPH STREET • BELLWOOD, ILLINOIS

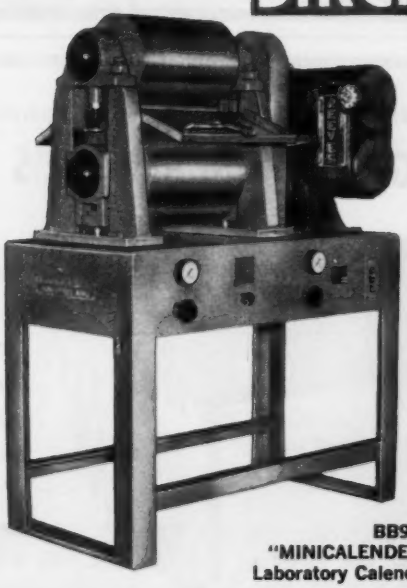
And . . . for complete spray nozzle information, write for Catalog 24.

UP FRONT at the **Parade of Progress . . .**



BB962
MODEL 7
3 Roll Automatic
Cut-Off Winder or Batcher

SINCE 1883
BIRCH



BB969
"MINICALENDER"
Laboratory Calender

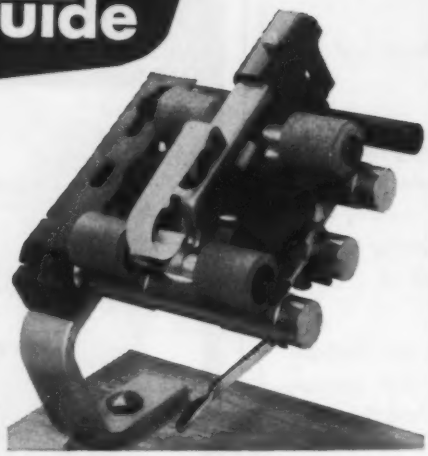
SPACES 466-467-468

American Textile Machinery Exhibition - International
ATMA
Parade of Progress
ATLANTIC CITY, U.S.A. MAY 23-27, 1960

BIRCH BROTHERS, INC.
Somerville 43, Mass., U.S.A.

CleanGuide
PATENTS PENDING

SPINNING
CHANGEOVER



- Improves Yarn Quality Through Better Apron Control
- Non-Oiling — Antifriction Top Roll
- Operates Clean — Easy to Install or Remove
- Converts Practically All Types of Spinning to Double Apron Drafting

100,000 Spindles installed or in Process—See and Prove it for Yourself

COTTON-McCAULEY & CO., INC.

PAWTUCKET, R. I. GREENVILLE, S. C. CHARLOTTE, N. C. ATLANTA, GA.

MANUFACTURED BY MACHINECRAFT, INC., WHITMAN, MASS.

Available through Saco-Lowell Shops and their agents

When you can't afford the luxury of operating inefficient spindles . . .

GET NIHON SPINDLE'S SPI-RA-CLEAN

The Spi-Ra-Clean is the last word in easier and speedier cleaning performance. Maintenance costs of spindles have been drastically reduced with the debut of Nihon Spindle's Spi-Ra-Clean.

Main Products :

Parts—Spindles, Rings, Fluted Rollers, Top Rollers with Bearing
Equipments—Pneumaniez, ACS (Automatic Card Stripper), BLO-Cleaner (Blow Cleaner for Ring Frame and Winder, etc.), Spi-Ra-Clean (Automatic Cleaning and Lubricating Device for Spindles)

Nihon Spindle Mfg. Co., Ltd.
Mengyo Kaikan Bldg.,
Bingo-machi, Higashi-ku,
Osaka, Japan

U.S. Representatives
Edward S. Rudnick
Room 404, Olympia Bldg.,
New Bedford, Mass., U.S.A.
Tel: WYman 6-5528
Cables: RUDNICK NEWBEDFORD

sulting yarn is very uniform in both texture and dye affinity. It is for these reasons that it has experienced wide acceptance in multifeed knitting, tricot knitting, weaving, etc. Although the yarn was first used in knitted sweaters, its use in weaving is expanding very rapidly.

Saaba yarn's high degree of heat setting, accomplished by two heating operations, makes it satisfactory for many applications. This yarn stability has enabled dyers to dye Saaba in yarn form with little loss in texture. A complete range of colors can be obtained in fast colors. Much of this yarn is presently being knit into Jacquard bathing suit blanks in a variety of colors.

With the variety of yarns which can be made by the Saaba process it is difficult to visualize many applications where such a yarn will not improve (nor at least duplicate) fabrics made of other textured yarns.

WK-A method

(from page 235)

ing the two formerly used for knitting the body. Two more fingers are dropped or placed into position to feed the pattern section or diamond. Patterning yarns may be knitted either from the main or the auxiliary station, as may wrap yarns.

(e) No. 2 wrap yarn is knitted from the main station, while diamond yarns are knitted from the auxiliary station.

To complete the pattern, it then becomes necessary to alternately progress the various pattern segments about the sock body. This is done, and a unique fabric is formed.

Although the WK-A method has many advantages, it was also found to have its disadvantages. It was observed that the layout pattern work was very complex and slow. It was also found that a fixer had to be taught the method fundamentals before he could attempt to fix a machine, even though he had been familiar with the same machine on conventional work.

Even though this method is new,

Put your capital to work...

FULL TIME

Your capital can produce maximum profits only if you give it the chance for maximum turnover.

You can release capital tied up in accounts receivable and accumulated seasonal inventories through FACTORING — the time-tested method of stimulating capital turnover and of controlling the vital cash flow.

Let us tell you how your business can gain through factoring.

John P. MAGUIRE & COMPANY INC.

370 4TH AVENUE, NEW YORK / MURRAY HILL 3-4141

ONE COILER EXCELS!

McDONOUGH

There are more McDonough large coilers in use than any other make. Try one in your mill without obligation and learn why.

McDONOUGH POWER EQUIPMENT, INC.
McDonough, Georgia, U.S.A.

INDUSTRIAL ENGINEERS

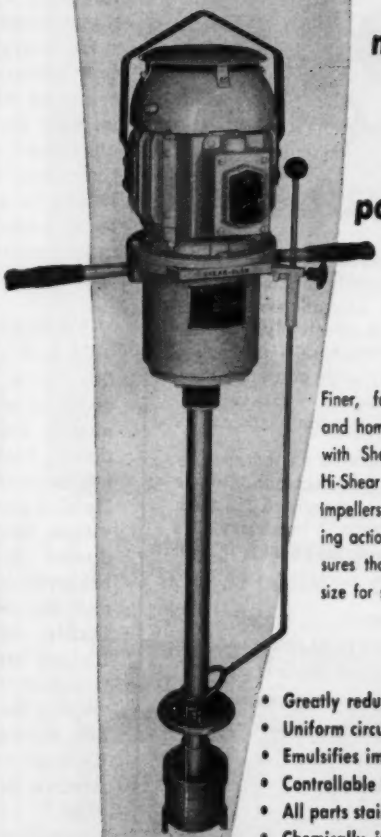
- MODERNIZATION PROGRAMS
- PLANT LAYOUTS
- COST SYSTEMS
- COST REDUCTION REPORTS
- WORK LOAD STUDIES
- MANAGEMENT PROBLEMS
- SPECIAL REPORTS

RALPH E. LOPER CO.

Greenville, S. C., Dial CEdar 2-3868 • Fall River, Mass., Dial OSborne 6-8261
Specializing in Textiles Since 1914

SHEAR-FLOW

the modern mixer with power shearing



Finer, faster blending, dispersing and homogenizing is now possible with Shear-Flow's new Model RL Hi-Shear Head. Finely spaced dual impellers induce considerable shearing action and high pumping pressures that rapidly reduce particle size for superior material mixtures.

- Greatly reduces mixing time
- Uniform circulation—no vortex
- Emulsifies immiscible liquids
- Controllable flow pattern
- All parts stainless steel
- Chemically inert seals
- Handles viscous materials with ease
- No operating Torque
- Disperses, blends, homogenizes

GABB SPECIAL PRODUCTS INC.
Windsor Locks, Conn.

SHEAR-FLOW
GABB SPECIAL PRODUCTS INC.

☐ Have representative call
☐ Send more information

Name_____

Position_____

Co. & Address_____

_____

THE RIGHT ANSWERS IN 3 SECONDS!

MOISTURE REGISTER'S MODEL 5 checks moisture accurately in almost every known textile. Any untrained operator can use it effectively – in any stage of production – on cones, beams, skeins; loose or compressed yarns and fibers; Wool, Cotton, Nylon, Rayon, Dacron, Orlon, etc.

It can be calibrated on the spot by plugging the test electrode into the self-checking standard . . . then trimming to zero if necessary. It's always right on the money.

Model 5 features:

- **Trims to Zero on the spot.**
- **Portable, rugged, simple to use.**
- **Gives right answers, anywhere.**
- **Factory-set to your needs.**
- **All common textiles.**
- **2-week free trial.**

SEND FOR NEW TECHNICAL DATA and information on 2-week free trial.

ELECTRONIC MOISTURE REGISTER Instruments

Moisture Register Company, Dept. TI
P. O. Box 910, Alhambra, California
Please send data on new Model 5's.

We are testing _____

in moisture range from ____% to ____%

Firm _____

By _____ Title _____

Address _____

City _____ State _____

its success has been overwhelming. Demand has increased to the extent that a licensing program is currently under consideration at Wright Knit to permit other interested firms to produce similar patterns using the WK-A method.

Education discussion

(from page 257)

facturing and distribution of textile products."

He continues, "It is our feeling that when the textile graduate comes to our organization, we can instruct him in the specifics of our machinery and processes and that the time he spends in college should be allocated to preparation for assuming the responsibilities of management in a modern industrial society."

ANOTHER EXECUTIVE wrote: "We look for the 'whole man' of the textile industry. He is the individual who possesses the fundamental knowledge I have mentioned, compounded of class-room, laboratory, and practical training. He also possesses something else—vision, imagination. The textile industry is headed for greater achievements in the next 75 years, and the educational objectives of textile colleges certainly should include breadth of imagination. To this end, textile skills should not merely be taught, but dramatized and romanticized. Students should be inspired, their creative and inventive genius encouraged to pioneer."

Smaller manufacturing units have somewhat different viewpoints, as the next statement reveals:

"The training desired from the school would be a general knowledge of mill manufacturing, and with us this would include blending of synthetic fibers, carding, spinning, dressing, weaving, dyeing, and finishing. On top of this, an aptitude for mechanics would certainly be an asset. Perhaps you feel that the above would be asking too much but since our operation is rather small, consisting only of six cards and sixty-four looms, it is necessary for an applicant to be versatile and have an over-all knowledge of manufacturing not specialized in any one line."

Many educators believe that the total impact of the college should be as important as any classroom. This is supported in this excerpt from a personnel manager: "Leadership, self-reliance, and initiative are areas of supervision which require 'climate' in which to develop. We believe that these qualities must come in a large part from within the individual. It is our educational institutions' responsibility to provide a 'climate' which will motivate these qualities in each individual."

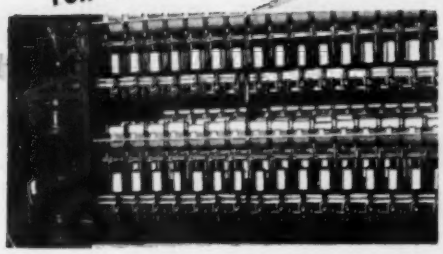
A COMMENT, the first sentence of which is repeated a surprisingly large number of times in slightly different form, is summarized in the next extract from a dyeing corporation president: "It is my belief that textile colleges would do well to develop courses heavy in the arts, with majors in chemistry, mathematics, and business economics. Chemistry and dyeing should be expanded to include fabric finishing; and if students were instilled with the importance of mechanization of operations to reduce labor costs, I could ask for little more."

Many other answers are rather well combined in this statement from the president of a major textile corporation: "The textile colleges are to be commended for the well-balanced courses now being presented. To these should be added courses designed to improve a person's ability to exercise good judgment, logical thinking, and the ability to make accurate and sound decisions.

"Prospective management should also be concerned not only with the knowledge of machinery and its operations but the motivation of individuals as well. Courses in human relations should be required. This is equally as important as technical training.

"The results of higher education, whether the individual exhibits extraordinary or average scholastic ability, do not predicate immediate acceptance in today's textile industry. We give great significance to persons who exhibit a combination of desirable traits such as aggressiveness, sociability,

NEW TON-TEX SUPERFLEX TWISTER BELTS FOR SYNTHETIC YARNS



New construction, with center strength plies of special synthetic duck. Combines great strength, flexibility and little stretch, with smooth, vibrationless operation so necessary to today's high speed, heavy duty frames.

Furnished endless to your size, or in roll stock for vulcanizing on your machines.

THE RUNNING MATE OF SUPERFLEX CONER BELTING

Write for Details

TON-TEX CORPORATION

31 Columbus Ave., Englewood, New Jersey

GREENSBORO, N. C. 1910 E. Wendover Ave. BOSTON, MASS 51 Sleeper St.

Serving Industry Over a Quarter Century

PERFORMANCE GUARANTEED

with HERBERT STATIC ELIMINATORS

in the Act!

MAKE US PROVE that our **Oxy Cold Bars** or **Curastats** are the complete answer to your static problems. Send details of your requirements for recommendations and literature.

HERBERT PRODUCTS, INC.

LINDEN AVE., WESTBURY, N. Y.

EASTERN ENGINEERING COMPANY

CONSULTING ENGINEERS

REPORTS
DESIGN
SUPERVISION

ENGINEERS

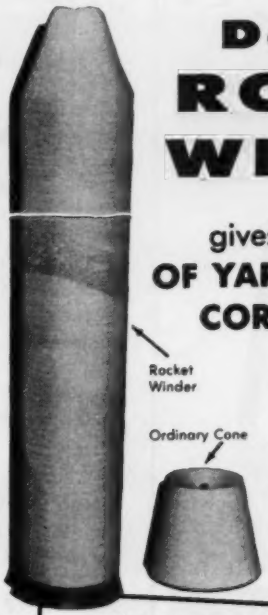
70 FAIRLIE ST., ATLANTA 3

INTERSTATE TEXTILE EQUIPMENT CO., INC.

proudly presents

the Sensational, New

Delerue ROCKET WINDER



gives you up to **9 LBS. OF YARN** on a **30-INCH CORELESS PACKAGE**

This incredible, six-spindle winder from France winds yarn at speeds up to 1,100 yards per minute at a high crossing ratio. Layers of crossed yarns are superimposed on a tapered surface of 18°. This factor—and the absence of a core—permits high speed unwinding with virtually *no tension.*

The PERFECT PACKAGE for . . .

DYEING • KNITTING • WARPING
SHUTTLELESS LOOMS • COP WINDING

IDEAL FOR . . . Cotton . . . Wool . . . Spun Yarns

SEE the Delerue ROCKET WINDER in action at Booths 1535, 1536 and 1537 at the ATME Show in Atlantic City. Bring your own yarn—we'll wind it for you at the show!

4389

Sole Agents

INTERSTATE TEXTILE EQUIPMENT CO., INC.

P. O. Box 927, Charlotte 1, N. C., ED 3-1894 • Empire State Building, New York 1, N. Y., Penn. 6-0451

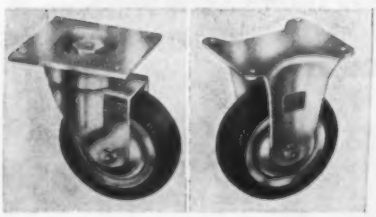
Your budget never had it so good

NEW! 90 Series

DARNELL

COMPETITIVELY PRICED

CASTERS



Our customers helped us design this new caster. Our men in the field reported your needs — then our engineers designed the 90 Series caster.

This series offers a maximum of service, operating economy and long life — AT A LOW PRICE, yet it is engineered to maintain

DARNELL STANDARDS OF HIGH QUALITY

DARNELL CORPORATION, LTD.

DOWNEY (Los Angeles County) CALIF.
37-28 SIXTY-FIRST, WOODSIDE 77, L.I., N.Y.
36 NORTH CLINTON ST., CHICAGO 6, ILL.
1000 PEACHTREE N. E., ATLANTA, GA.

and adaptability, rather than one who is recommended only for scholastic attainment and aptitude. We want young men who will be able to think for themselves and have a desire to work, and who can meet the challenge of problems without being pushed or urged."

SPECIALIZATION in business courses is sometimes frowned upon by academicians, but not by this manager of personnel who advises, "The last item we could point out which we believe to be most important is training in marketing concepts as they pertain to the textile industry. In a management position he will be faced with decisions concerning products of his company. These decisions will be more meaningful if he has an idea of the product and the product line in relationship to the channels of distribution.

"Today's changes in marketing are almost as great as they are in the case of synthetic fibers in that the present and future ideas are progressing at a rapid pace. The advent of specialized buying groups, chain stores, shopping centers, etc., requires a thorough knowledge of merchandising techniques. Merchandising and salesmanship should find a prominent place in the education provided at a textile school, regardless of the student's place in the business world. The textile graduate eventually will be in a position of having to sell at all times, either a product, idea, program, or a policy for his company."

That there is more necessary than careful curriculum planning was also clearly presented in the following excerpt: "We have talked endlessly about our need for scientists and about the importance of stimulating our youth to scientific careers. If that is to be more than idle conversation we must insure inspiration and dedication in the classroom, since it is on our teachers that we must rely if the creative talents potentially available in our young people are to flower and bear fruit. All of us, I am sure, have experienced in school or college the thrill of discovery of some branch of human knowledge, brought to us by the inspiration, the eloquence, and the dedication of a brilliant teacher.

"It makes little difference, in fact, what field of human endeavor we consider, whether it be science, the arts, the spiritual disciplines, or the secular affairs of men, our progress will depend on the maintenance of an atmosphere which will foster individual effort at its maximum level. It seems to me that such an atmosphere has two essential components: first, a maximum of opportunity for individual self-expression and, second, a maximum of incentives for achievement."

As with most teachers, "outcomes" rather than listings of courses to be taken are rated as very important. This is well stated by a personnel director: "Thus, our textile manager is a man who must manage both men and machinery. His training must equip him first with a technical knowledge of fibers and machinery. Second, he must be trained as a leader of men, have a true under-

FORESIGHT
CAN SAVE YOU . . .
MONEY!

ANDERSON SHIELDS

will reduce . . .
CHIPPING — SPLITTING
BREAKING
of your . . .
SPOOLS AND BOBBINS

Send Us Your Problems:
We Will Cooperate
— To Save You Money.

TEXTILE SHIELD CO., INC.
LAWRENCE, MASS., U.S.A.
SERVING NEW ENGLAND SINCE 1917

standing of men and a desire to work with them. Third, his training must include courses which will encourage him to imaginative, creative thinking so that he may visualize new methods and new applications of the old.

"It is my opinion that our technical schools are equipping their graduates well with the first need of technical essentials. They have shown recent improvement in human relations and are showing more interest in this field. However, I have not seen where there is much stimulation to creative thinking. Such thinking not only will bring changed methods and lower costs, but consumer or ultimate user benefits will be most prominent.

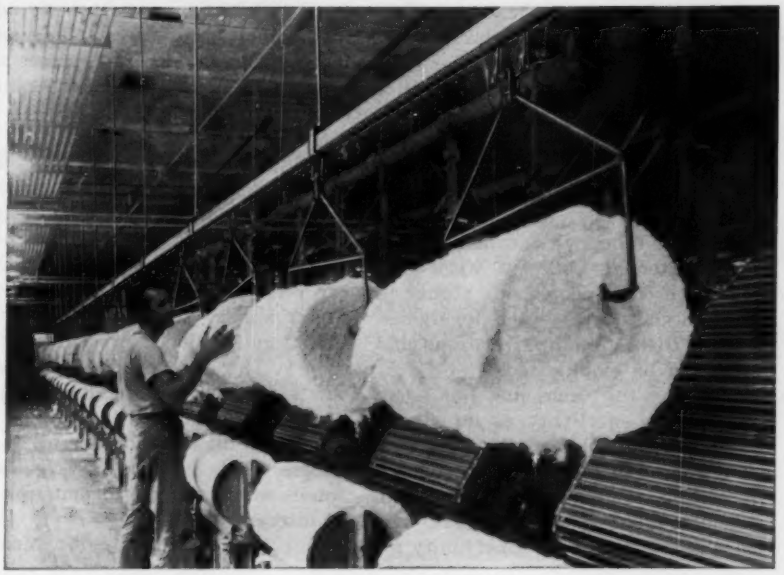
"Stimulation of the inquiring mind and encouragement to creativity, I feel, are most needed at this time."

IT IS POSSIBLE to state in many ways that learning ought to be continuous. One executive carries this through to the point that he believes technological progress requires for its fulfillment that the technician or engineer should judge every proposed advance on the basis of what improvement the consumer will recognize in the product. "We feel that the technician's job is not finished until he has presented convincing reasons why the work he is doing will result in a better product — one which the consumer will buy because it is above average."

Some college professors are deeply grieved whenever industry is asked what education ought to do. It is difficult to escape the suspicion that there are still too many professors who think that when education becomes "useful" it somehow becomes degraded. If one accepts this hypothesis, presumably it would be necessary to praise and present the "useless." The purpose of education is such that we can't afford to spend time on whatever may be useless to our society. The terms, of course, must be carefully scrutinized before "useless" is applied to any subject. The only point insisted upon is that no subject should be considered as low on the scale of im-

. . . for a new textile plant going into production

or the expansion of present production lines



R-W "Zig-Zag"® CONTINUOUS POWER CONVEYORS

provide maximum efficiency and economy

R-W "ZIG-ZAG" Conveyors effectively meet the demands of today's highly competitive textile market by efficiently utilizing valuable overhead space to provide a continuous flow of materials for maximum production. R-W "ZIG-ZAG" Conveyors are extremely flexible . . . easily move up, down, in, out and around . . . carry unit loads up to 125 lbs. at speeds from one inch to 100 feet per minute. R-W "ZIG-ZAG" Conveyor systems may be quickly and easily altered, expanded or relocated by plant personnel. "ZIG-ZAG" Conveyors are designed, manufactured and backed by the leading firm in this field for over 75 years . . . Richards-Wilcox.

"Zig-Zag" QUALITY FEATURES

- **SAFE** . . . all moving parts of the chain are fully enclosed and protected from lint, dirt and dust.
- **STRONG** . . . a continuous chain of alternate horizontal and vertical wheel units travel through a rugged steel track.
- **FLEXIBLE** . . . easily installed in any plant. Easily changed or relocated to meet any plant alterations or requirements.
- **ECONOMICAL** to purchase, install and operate.
- **SPACE SAVING** . . . available with standard horizontal or vertical curves . . . two foot radius (others available).

WRITE TODAY for complete information Request Catalog No. A-93R

Leading manufacturer of Track Hangers, all types of hardware and Electric Door Operators for over 75 years.

Richards-Wilcox
MANUFACTURING COMPANY
"MATERIAL HANDLING DIVISION"

440 W. THIRD STREET, AURORA, ILLINOIS • Branches in Principal Cities

portance merely because it is immediately useful. Conversely, undue stress on the immediately useful at the expense of general education can become only training. This is illustrated by this comment from a vice president: "School preparation can only give potentiality to the textile executive in the development of his management talent on the job, particularly at the college level. I believe only the very basic technical courses can be meaningful.

"I think a liberal arts preparation of a man's thinking and working habits is most important. Mainly, I believe the man — his character, his ability to work with and through people, his ability to learn and adapt — is more significant than specialized training and should be emphasized."

Along the same line but again stressing excellence as an all-important goal is the following: "The college which sets high standards of achievement for the student in whatever field he pursues, and which provides an opportunity for him to develop his leadership abilities along with his intellectual abilities is most likely to produce a well rounded, competitive applicant whom we would consider for our business. The technical training is secondary, but serves the purposes of arousing an interest in the retail business, and of giving the student an understanding of the business so that he makes a better judgment as to whether or not it is a field for him."

GIVEN A COLLEGE with a clearly defined community, such as a textile college with the textile and allied industries, it should be possible to evolve a college which can meet modern industrial needs.

Our survey shows that the interest and ability is present in industry. The college that first uses this source as an effective means of reorganization will perform a highly useful function for all the people of its country, as well as for its most immediate community of interest.

Not long ago, Margaret Mead wrote an article (Why is Education Obsolete?) in the *Harvard Business Review*. This article was headed: "Industry, through its continual wrestling with product and methods obsolescence, is uniquely suited not only to highlight our educational obsolescence *but to do something about it.*" In the article she said, ". . . if industry as represented by individual leaders from management and labor . . . would come forward with plans . . such plans would be heard."

SUMMARIZING our own survey, using both the letters quoted here and the many others, equally good, which we could not quote for lack of space, we could state these conclusions;

1—The textile colleges do not report to industry often enough or effectively enough on the many educational advances these colleges have made. Many textile executives, the letters revealed, still think of a textile college as being primarily a trade school.

2—Textile colleges ought to im-

Can you tell these travellers

NOW. . . with Coats & Clark nylon travellers *in color* . . . you can! Colored travellers allow for quick, accurate identification . . . enabling you to distinguish easily between various weights and style applications in the twisting room.

All colors are carefully spaced for maximum identification ease . . . repeated only in distinctly different sizes or types. Coats & Clark's wide, in-stock selection includes 237 styles in a range of 16 colors. Color chart . . . as well as sample colored nylon travellers . . . are yours for the asking.

One word of caution: these colored travellers cannot be dyed and also given the Coats & Clark special finishing treatment that imparts the longest life and greatest abrasion resistance to the traveller. For the time being, one may have to choose between the advantages of color identification and some reduction in traveller life. For best performance, we recommend the *special finish* (used on all regular shipments) that Coats & Clark has developed over a period of years through its Research activities and extensive observation of mill performance under operating conditions.

Judge for yourself. Try both regular and colored nylon travellers, and evaluate their advantages and performance under your own operating conditions. Or, have one of our experienced Coats & Clark sales engineers help you work out . . . *in your own mill* . . . the most efficient traveller application for your needs.

prove even more rapidly than they have. Only active interest from textile leaders, in cooperation with the colleges, will make this possible.

3—The interest in textile colleges is very great, as is the ability of textile executives to assist the colleges. Closer cooperation should be immediate and continuous.

In the Philadelphia Textile Institute the industry has an excellent laboratory for experimentation to develop an education that will not be obsolete. Our letters from industry suggest many men in textiles may now be ready to plan further with us in our efforts to improve higher education on our own campus for the benefit of society, the individual, and inevitably thereby, the corporations which accept the challenge of this joint planning for excellence. Of course we shall invite or welcome suggestions and assistance from business leaders in all industries.

One more quotation, this time from the fourth report of the Special Studies Project of the Rockefeller Brothers Fund: "The truth is that never in our history have we been in a better position to commit ourselves wholeheartedly to the pursuit of excellence."

The challenge to business and to education is very real, very great.

What are we waiting for?

A surplus of college students? Not at one Philadelphia school

Textile institute feels impact of industry's long slump, plans broader curriculum

■ WHILE MANY colleges fret about the hordes of applicants descending on them, a small school here sits on its modern, $4 million campus and wonders where the students went.

To all outward appearances, Philadelphia Textile Institute is enjoying good times. Its new 17-acre campus, opened in 1949, is dotted with trim, red-brick buildings, among them a $600,000 student activities center, opened just two months ago. Job openings are plentiful for the school's graduates, who are trained for administrative posts in the textile industry.

Philadelphia Textile, whose enrollment is down to 352 from a 1949 high of 541, faces this difficulty: In an age of specialization, its specialty is not attracting students. "We could take 200 more students immediately with no problem at all," comments Dr. Bertrand W. Hayward, president of the college.

Other textile schools slip, too

The Philadelphia college is not alone; other textile schools also are having troubles with sinking enrollments. Since 1948, the total undergraduate enrollment of the 10 major textile colleges has dropped from 4,107 to a current 1,684. Although many outsiders consider the textile colleges mere trade schools, this is short of

apart at a glance?

Advantages of Coats & Clark Nylon Travellers:

- Up to twice as high spindle speed
- Less staining of yarn
- Much less oil required
- Longer-lasting travellers
- Less down time
- More yardage on your present bobbins
- Less end breakage
- Less stock of travellers
- Cooler running ring rails and rings
- Larger diameter rings, last indefinitely
- Greater safety for workers
- Cleaner, quieter frames

COATS & CLARK INC.

NYLON TRAVELLER DIVISION, 1292-98 McCarter Highway, Newark, N. J.

COATS & CLARK INC.
Traveller Division, Dept. I5,
1292 McCarter Highway, Newark, N. J.

☐ Please send me Color Chart for Nylon Travellers.

☐ Please send me sample Nylon Travellers in Color, Style #_____
(Indicate traveller designation here)

*Name*_____

*Mill Name*_____

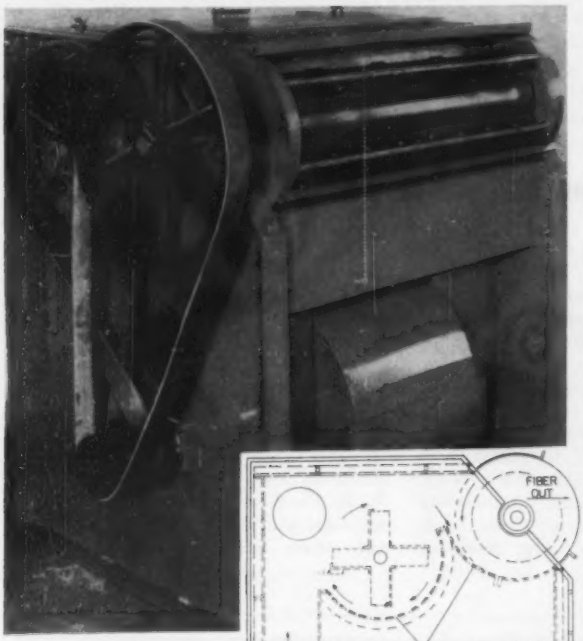
*Address*_____

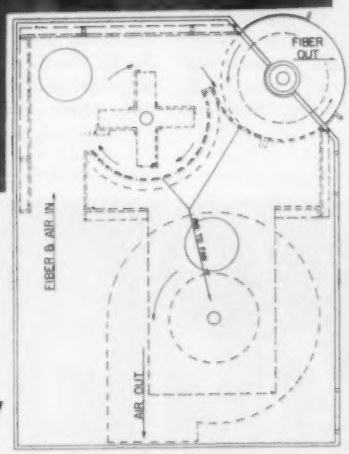
*City*_____ *Zone*____ *State*_____

FIBER CONTROLS → FC-83

SCREENLESS CONDENSER

HEAVY DUTY — HIGH PRODUCTION
SELF-CLEANING CONDENSER





Model FC-83

SCREENLESS CONDENSER,

made for Heavy Duty & High Production, has proven itself in efficiency & capacity production.

Will handle up to 2000 pounds of fiber per hour through ducts approximately 200 feet in distance.

It contains 2 Doffer Blades and 2 Separator Plates and a 16 inch self-contained Fan with 24 inch diameter.

It will discharge fiber without:

— Tumbling
— Rolling or
— Pilling.

Inquire about more complete details of this equipment. Call or write:

U. S. Sales Agents:
PARROTT and BALLENTINE, Inc.
3440 Augusta Road, Greenville, S. C.

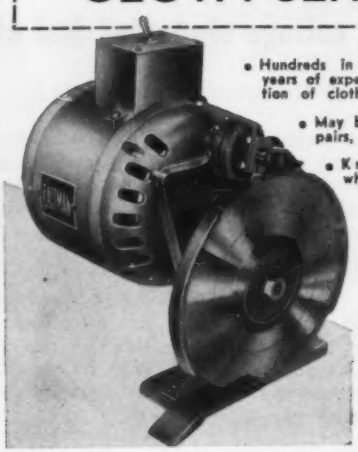
FIBER CONTROLS CORPORATION
BOX 1358 GASTONIA, NORTH CAROLINA

for CONTINUOUS SELVEDGE-TRIMMING, CLOTH SLITTING, or BOTH SIMULTANEOUSLY

EASTMAN model SMS

STATIONARY-MOUNTED

CLOTH SLITTER

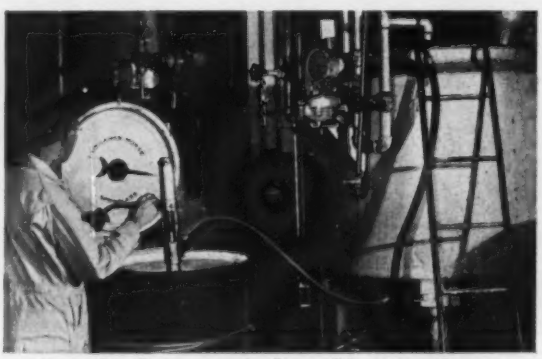


- Hundreds in use. Backed by 58 years of experience in the production of cloth cutting machines.
- May be mounted singly, in pairs, or spaced as needed.
- Knife is sharpened while machine is in use.

Send for Folder

DEMONSTRATION in YOUR PLANT gladly arranged. Write, wire or call.

EASTMAN MACHINE COMPANY
BUFFALO 3, N. Y.
CLeveland 5768



Batch by weight direct from drum... quickly and exactly!

Graco Fast-Flo Pumps reduce handling costs. They transfer measured amounts of different fluids direct from original containers. Ideal for batching, applying or mixing . . . fluids are transferred quickly and safely. Aids good housekeeping; eliminates contamination.

Send for more information about this amazing *Graco* Fast-Flo that's suited both for large and small operations. It handles materials as thin as alcohol, as thick as cookie frostings! Fast-Flo Pumps are also available in stainless steel. Send for free idea booklet!

For nearest GRACO Supplier
SEE the telephone directory YELLOW PAGES
Look under "SPRAYING EQUIPMENT"

GRACO
ENGINEERS AND MANUFACTURERS
GRAY COMPANY, INC.
82 Graco Square
Minneapolis 13, Minnesota

Factory Branches
New York, N. Y.
Philadelphia, Penna.
Detroit, Michigan
Atlanta, Georgia
Chicago, Illinois
Houston, Texas
San Francisco, Cal.
Sales Office
Toronto

WATSON-WILLIAMS

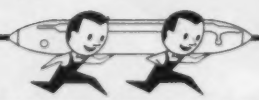
WEAVE-ever Shuttle

Made full thickness of resin impregnated and laminated fabric, for long life and extra rugged service.

Bring your shuttle knowledge up-to-date at Booths 672-675, the week of May 23rd. Watson-Williams whole family of shuttles will be on hand.

See the full display of
EMIL ADOLPH TUBES, QUILLS and BOBBINS

The outstanding yarn carrier products of the world distributed by Watson and Desmond throughout the South, and by Watson-Williams Mfg. Co. in New England, New York, Ohio, Indiana, Illinois, Michigan, Wisconsin, Minnesota and Iowa.



THE SHUTTLE PEOPLE SINCE 1830

WATSON-WILLIAMS MFG. CO.

MILLBURY, MASS.

Representatives: Howard S. Pellatt, 4 Branch Avenue, Saylesville, R. I.; Sutton M. Ebert, Box 7143, Elkins Park, Philadelphia, Pa.; Watson & Desmond, Inc. Box 1954, Charlotte, N. C.; John Wyatt and Ralph Patton, Box 701, Greensboro, N. C.; Ray A. Norman, Box Drawer 779, Greenville, S. C.

the truth. Students learn textile manufacturing processes and management, and graduates receive recognized college degrees.

Officials of the textile schools figure their chief problem is the textile industry itself. Although the industry scored sharp gains in output and sales last year, the upturn had been preceded by a long depression. The school men say the upturn has not lasted long enough to erase memories of the troubles that preceded it. "And until last year, almost anybody would have regarded the textile industry as the last one he would want to enter," Dr. Hayward says.

An official at Lowell Technological Institute in Lowell, Mass., another textile school, comments, "Talk to a boy in New England about a career in textiles and you just can't sell him on it."

Many of the textile schools are unwilling to wait to see whether the industry will continue to revive. Instead, they're taking aim at a broader group of potential students. A few days ago, for example, trustees of Philadelphia Textile approved the first major curriculum revision in the school's 76-year history.

Starting next fall, the school will offer programs in non-textile fields —business administration and chemistry, and probably industrial engineering as well. "For the first time it will be possible to go through four years here and never take a textile course," comments a school official.

Less time on yarn making

In addition, Philadelphia Textile is telescoping and combining a good number of so-called "processing" or practical courses in textiles to give students more time for the humanities and sciences. For example, two courses in yarn manufacture next year will be combined; the amount of time the student spends on the topic will be cut by more than 25%.

These changes have the blessing of textile companies which help support the school. In fact, for some time textile men have had reservations about an overspecialized undergraduate training program. With its revamping, Philadelphia Textile hopes not only to make its textile curriculum more enticing but also to attract non-textile students clamoring for a spot in college.

Just how far a textile school can stray from its original purpose can be seen at Lowell Tech. In recent years, it has been steadily widening its curriculum. Now it caters mainly to the more glamorous electronics in-

Is this the World's Toughest Test For Brushes?

Jenkins' METLKOR Scrubber Brush

The DAREX Model ND Blanket Washer Unit

When Dewey and Almy Chemical Company developed their high-speed blanket printing process "DAREX VERSA-PRINT" a difficult problem arose. Colors picked up by the "DAREX" embossed blanket had to be removed with each turn around . . . colors that contained gums, resins, rubbers, etc. They had to be removed by solvents, detergents and high pressure water sprays at washing and drying speeds of 180 yards a minute. A special automatic machine, the "DAREX" washer was developed, in which seven specially designed Jenkins' METLKOR brushes are used.

CRUCIAL TEST FOR JENKINS' BRUSHES

"It is difficult to imagine conditions more severe than for the first three scrubbing brushes in this machine," states Mr. H. H. Bailey, Sales Manager of Printing Products Division of Dewey and Almy Chemical Co., Div. of W. R. Grace and Co. "Temperatures range from 40° to 212°F. Vapors range from saturated steam to mixtures including high percentages of mineral and organic solvents, caustics and acids. At speeds up to 1300 rpm the brushes must not vibrate. Jenkins' brushes are more than equal to these requirements and provide long and satisfactory life."

Specify Jenkins' METLKOR . . . the original . . . the best Metal-Core Brush

METLKOR®

CYLINDER BRUSHES

and **LIFEWOOD®** WOOD BACKED BRUSHES

M. W. JENKINS' SONS, INC.

Serving Industry for 80 Years

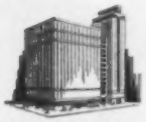
132 Pompton Ave., Cedar Grove

Essex County, N. J., CEnter 9-5150

4

INCOMPARABLE CONVENTION AND SHOW CENTERS IN THE SOUTH

★ Central Locations
★ Flexible meeting space
★ Heavy duty facilities
★ Visual and acoustical devices
★ Excellent banquet facilities
★ Guest rooms—modern decor. TV
★ Hotels 100% air-conditioned
★ Ample garage facilities
★ Superb restaurants



DINKLER PLAZA
ATLANTA, GA.
Meetings • 25 to 2000
Banquets • to 1500
Guest Rooms • 600

DINKLER—TUTWILER
BIRMINGHAM, ALA.
Meetings • 25 to 1800
Banquets • to 1300
Guest Rooms • 450

DINKLER—JEFFERSON DAVIS
MONTGOMERY, ALA.
Meetings • 15 to 350
Banquets • to 275
Guest Rooms • 250

DINKLER—ANDREW JACKSON
NASHVILLE, TENN.
Meetings • 40 to 400
Banquets • to 350
Guest Rooms • 400

WRITE SALES MANAGER
AT THE HOTEL OF YOUR CHOICE
FOR COMPLETE CONVENTION BROCHURE.

Carling Dinkler, President
Carling Dinkler, Jr., V. P. and Gen. Mgr.

DINKLER HOTELS

dustry in New England with such courses as electrical engineering, nuclear science and engineering, and plastics technology. Less than one-fifth of the 630 upperclassmen (above freshmen) are majoring in textiles.

In the South, state schools such as the School of Textiles at Clemson College in South Carolina and the A. French Textile School at Georgia Tech, are moving toward less specialized textile curricula. Not long ago, for example, Georgia Tech reduced its textile course requirements for a B.S. degree in textiles from 35% of the curriculum to 28%.

Reprinted with permission, from *The Wall Street Journal*. Copyright © 1960, Dow Jones & Co., Inc.

MILL NOTES

(from page 54)

sq ft of manufacturing space. Later a 40,000 sq ft plant and a 20,000 sq ft warehouse will be constructed. When the entire project is completed it is anticipated 500 persons will be employed.

Cone Mills Corp. has announced acquisition of a major interest in a new company which will manufacture polyurethane foam for rug and other industries. Machinery and equipment are on order for the plant, which will be located in the vicinity of Piedmont, N. C.

West Point Manufacturing Co. has placed orders for 20,000 spindles of standard equipment and 450 looms to be installed in the Shawmut (Ala.) Mill for the manufacture of fine combed yarn fabrics.

Avondale Mills, Sylacauga, Ala., has announced plans to install new equipment in the Alexander City plant at a cost of more than $250,000. Modernized spindles and other equipment will be installed in the Pell City plant, 30 additional looms will be installed in the Birmingham plant, and new equipment will be installed in the Sycamore and Sylacauga plants. Installation of special equipment has been completed at the Stevenson mill.

Indian Head Mills, Inc., has announced the purchase of **Hoosac Mills Corp.,** North Adams, Mass., a wholly-owned division of Associated Textile Companies. The latter firm will continue to operate under present management but merchandising will be taken over by Indian Head.

CANVAS BASKETS

Manufactured By

STEELE

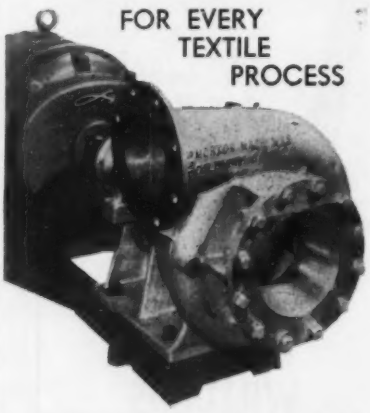
ALSO
CANVAS TRUCKS
CANVAS HAMPERS
CANVAS BAGS

BOOTH #293

STEELE CANVAS BASKET CO., INC.
199 CONCORD TURNPIKE
CAMBRIDGE, MASS.

PUMPS

FOR EVERY TEXTILE PROCESS



The Morton Machine Works supplies pumps for every textile process.

Morton engineers are skilled pump technicians and their services are available to you. Call today!

MORTON
MACHINE WORKS, INC.
COLUMBUS, GEORGIA

MARSHALL and WILLIAMS CORPORATION

Demonstrates "What's New in Tentering"

meet us at
BOOTHS 559-563, 574-578
at the
ATMA Exposition
May 23rd through 27th
Atlantic City, N. J.

M & W REPRESENTATIVES

John C. Nash . . . . . President
Fred H. Land . . . . . Vice President
James A. Love . . . . . Export Representative
Albert J. Marshall . . . . . Sales Engineer
Edward E. Ford . . . . . Sales Engineer
William C. Brown . . . . . Sales Engineer
Fred Hyatt . . . . . Sales Engineer
William Tomlinson . . . . . Designer

. . . and representatives from E. G. Paules & Co. and Rudel Machinery Company Limited

See newly designed tenter frame; drive units, light and heavy frames, clips in innumerable styles and combinations! As tentering specialists in original design and expert manufacture, we can show you "what's new" to improve your operation. The complete M & W line includes —

HIGH SPEED TENTER FRAMES
MERCERIZING TENTERS
PIN TENTERS
TENTERETTES
TENSIONLESS BATCHERS
CONSTANT TENSION WINDERS
SWING PLAITERS
LET-OFF STANDS
OVERFEED EQUIPMENT
SELVAGE UNCURLERS
TENTER CLIPS
PIN PLATES & CLIPS

ATMA Parade of Progress

63-0

MARSHALL and WILLIAMS CORPORATION
PROVIDENCE, R. I. — GREENVILLE, S. C.
Canadian Representatives
RUDEL MACHINERY COMPANY LIMITED
Main Office • MONTREAL, QUEBEC
West Coast Agents: E. G. PAULES & CO. Los Angeles, Calif.
Export: AD. AURIEMA, INC., 85 Broad St., New York, N. Y.

K&D

Single Cylinder Waste Machines
with K & D Hopper Feeders, for profitable, efficient waste processing

High-Compression Lap Systems
Aluminum High Speed Sargent Combs for Hoppers
Ball Bearing Drop Shaft Levers for Pickers
Roller Bearing Lap Pins

KIRKMAN & DIXON MACHINERY CO.
Greenwood, S. C.
OR 3-3346

SAMPLE-CUTTING
PINKING MACHINES
All Sizes — hand and power
From 6½" Portable Model to 50" Power Unit
Write Today For Full Information.

CHANDLER MACHINE COMPANY
234 West St., Ayer, Mass.
Manufacturers of
World Famous PLEATING MACHINES

AMERICA'S SPRING STEEL DISTRIBUTOR

We have had over fifty years experience furnishing steel for both builders of TEXTILE MACHINES and makers of replacement parts for KNITTING MACHINES.

Modern Slitting and Shearing Equipment
WARD STEEL CO.
87-G RINDGE AVE. EXTENSION
CAMBRIDGE 40, MASS.
PHONE—
UNIVERSITY 4-2460

Reliable Accuracy*

G. S. SPEED INDICATORS & HAND TACHOMETERS

For Motors - Shafts - Spindles - Looms Turbines. Textile and Power Plants

*1% ACCURACY FOR ANY RANGE FROM 30 TO 1000,000 RPM OR SURFACE SPEED

FOR FULL DETAILS — REQUEST OUR 96 PAGE CATALOG AT ANY OF OUR 4 "COAST TO COAST" LOCATIONS OR AT YOUR FAVORITE LOCAL DEALER

SCHERR TUMICO

PRECISION MEASURING TOOLS AND INSTRUMENTS

WAREHOUSE STOCK, SHOWROOMS & SALES OFFICES AT
NEW YORK: 200 Lafayette Street, New York 12, N. Y.
ST. JAMES: St. James, Minnesota
LOS ANGELES: 3337 West Olympic Blvd., Los Angeles 19, Cal.
CHICAGO: 5045 W. Harrison, Chicago 44, Ill.
When writing to any of the above locations, refer to DEPT R-5

ALLEN BEAM COMPANY

NEW BEDFORD, MASS.

Beams for all makes of High Speed Warpers

LOOM BEAMS

Adjustable Loom Beam Heads

"Good Warps are made on Good Beams"

CLASSIFIED ADS

PACKAGE BLEACHING

WANTED FACILITIES FOR PROCESSING 30-40,000 LBS/WEEK 12/1 & 12/2 - 60/2 SOUTH-EASTERN LOCATION WOULD CONSIDER RENT, PURCHASE OR STARTING PLANT. PLEASE REPLY BOX 91 TEXTILE INDUSTRIES, 806 PEACHTREE ST., N.E., ATLANTA 8, GA.

FOR SALE

3—Foster 102 Winders, 9°36' Cones, 1946-48
4—Saco-Lowell 40", 3 Beater, Single Process Pickers
24—Whitin Model H spindle back Cards
1—Abbott #65 Cone Winder, 108 spindles

INTERSTATE TEXTILE EQUIPMENT CO., INC.

P. O. BOX 927 CHARLOTTE 1, N. C. EDISON 3-1994 • EMPIRE STATE BUILDING NEW YORK 1, N. Y. PEnn. 6-0451

BOBBINS—BOBBINS—BOBBINS

Our specialty is good used automatic loom bobbins. We also deal in twister and roving bobbins. Send us samples of what you need or what surplus bobbins you have.

CHARLES G. STOVER COMPANY
West Point, Georgia

BRASS **PIN-PLATES** All Sizes

PUT YOUR PIN TENTERS IN TIP-TOP CONDITION

• Pins in Stainless, Monel, Plain Steel.

All Diameters Any Length

SEND US OLD PLATE FOR QUOTATION

SOUTHERN TEXTILE WORKS

P. O. BOX [illegible] ANDERSON, S. C.

WANTED: SOLID BALL WINDER

Need winder in good condition capable of producing balls weighing 2-2/3 ounces dem. 2½" x 2" min. 16 spindles.

Reply to Box 90, TEXTILE INDUSTRIES, 806 Peachtree St., N. E., Atlanta 8, Ga.

FOR SALE

Large quantity good used spools (4" dia. inset fibre heads, 1⅛" hard maple barrel, 3¾" traverse length). Priced extremely low for quick sale. Samples on request.

RUMFORD RUBBER CORPORATION
Rumford 16, R. I.

SPECIALISTS IN

Complete **PICNIC** Programs

Anywhere In The Nation • Write For Free Details

CAMPSITE CATERERS
7510 Greengate Drive, Richmond, Va.

SALES REPRESENTATIVE WANTED

MANUFACTURER OF SPECIALTY MACHINERY HAS NEED FOR ADDITIONAL SALES HELP. COMMISSION BASIS WITH EXCLUSIVE TERRITORY. SEVERAL TERRITORIES AVAILABLE. SHOULD BE IN 35 TO 45 AGE RANGE AND PRESENTLY HANDLING SIMILAR ACCOUNTS. SUBMIT RESUME TO A. E. BROUGHTON & CO., INC., GLENS FALLS, N. Y.

WANTED

PRACTICAL DYE MAN. Fast growing Central California Carpet Mill needs experienced, practical Dye Man able to develop own formulas and supervise shift. Wool background necessary. Write Box 88, Textile Industries, 806 Peachtree Street, N. E., Atlanta 8, Ga.

Self Spraying **STATIKIL**

PRESS BUTTON AND SPRAY — TRADE MARK REG. IN U. S. PAT. OFF.

STOP STATIC ELECTRICITY

$3 per can • $30 per doz.

The Original The Only **STATIKIL**

1220 W. 6th St., Cleveland 13, Ohio

STATIC ELECTRICITY STEALS profits, causes fires and explosions! Kill it with inexpensive, trouble-free Static Eliminator Brushes. Fully guaranteed—thousands in use. Send for free illustrated folder today. Western Brush Co., Dept. T, 215 S. Western, Chicago 12, Ill. 2-60

FOR SALE

Loop conveyer dryer. Holds up to 103 inch wide goods, holds about 85 to 90 yards, variable speed, gas fired, heats to 350 degrees, recently overhauled and in excellent working condition, size about 15 feet wide-15 feet high-20 feet long. Proctor & Schwartz style.

FIBER CONE FINISH CO., 340 So. Ave. 17, Los Angeles, California, CApitol 2-1433.

ADVERTISER'S INDEX

A
Abington Textile Mchy. Works 298
Acme Steel Co. ..... *
Adams, Inc. 122
Adams Co., Inc., R. P. 294
Adolff, Emil 15
Air Permeator Mfg. Co. 23
Air Reduction Co., Inc. ..... *
Akron Spool & Mfg. Co. ..... *
Aldrich Machine Works 31
Allen Beam Co. 312
Allen-Bradley Co. 75
Allen Company, Inc. 54
Allen Sons' Co. Div., Wm. 297
Allied Chemical Corp.
National Aniline Div., Fibers Sales & Service 206
National Aniline Div. 51
Nitrogen Division ..... *
Semet Solvay Petro-chemicals Div. 37
Solvay Process Div. 49
Allis Chalmers Mfg. Co. 81
Allis Company, Louis 226
American Air Filter Co. 283
American Enka Corp. ..... *
American Gas Association 242, 243
American Lava Corp. ..... *
American Moistening Co. 7
American MonoRail Co., Inc. 194D
Conveyor Division ..... *
American Steel & Wire ..... *
American Viscose Corp. ..... *
Anderson Chemical Co., Inc 83
Anheuser-Busch, Incorporated 279
Antara Chemicals, General Aniline & Film Corp. ..... *
Applied Engineering Co. ..... *
Armstrong Cork Co. 200, 201
Arnold, Hoffman & Co. ..... *
Atkinson Haserick & Co., Inc. 268

B
Bahnson Co. 64
Barber-Colman Co. (Textile Div.) 216
Batson Co., Louis P. 119
Baxter Corporation ..... *
Becco Chemical Division 2
Bemis Brothers Bag Co. ..... *
Bendix Aviation Corp. ..... *
Benjamin Booth Co. 44, 45
Bijur Lubricating Corp. 84
Bingham's Sons Mfg. Co., Sam'l 8
Birch Brothers, Inc. 299
Borne Chemical Co. ..... *
British Northrop Sales Limited 82
Brook Motor Corp. 294
Buffalo Forge Co. 71
Buffalo Pumps, Inc. ..... *
Butterworth & Sons Co., H. W. ..... *

C
Carbic Hoechst Corp. ..... *
Carolina Machinery Co., Inc. 272
Carter Traveler Co., Div. A. B. Carter, Inc. 58
Celanese Corp. of America & Subsidiary Co's. 196, 197
Central Motors Lines, Inc. ..... *
Cen-Tennial Cotton Gin Co. 269
Chandler Machine Co. 311
Chemstrand Corporation (Acrilan) ..... *
Clark-Cutler-McDermott Co. 38
Classified Ads 312
Cleveland Tramrail Division, The Cleveland Crane & Engr. Co. 128
Clinton Corn Processing Co. 198
Clipper Belt Lacer Co. ..... *
Coats & Clark's Sales Corp 306, 307
Cocker Mach & Fdry. Co. 104
Columbia-Geneva Steel ..... *
Corn Products Sales Co. 211
Cosa Corporation 118
Cotton-McCauley & Co., Inc. 300
Courtaulds, Ltd. 89
Crompton & Knowles Corp. 96, 97
Croon & Lucke, G.M.B.H. 48
Crown Chemical Corp. ..... *
Curlator Corp., Textile Div. 115
Curtis & Marble Machine Co. ..... *
Custom Scientific Instruments, Inc. 291

D
Darnell Corp., Ltd. 304
Dary Ring Traveler Co. 204
Davis & Furber Mach. Co. 30
Dayco Corp. 230, 231
Delta Air Lines ..... *
Deublin Company ..... *
Diehl Mfg. Co. ..... Second Cover
Dinkler Hotels 310
Dixie Bearings, Inc. 136
Dixon Corporation 109
Dodge Mfg. Corp. ..... *
Dommerich & Co. L. F. ..... *
Dow Chemical Company Lurex Division ..... *
Draper Corporation 33, 90, 91
Dronsfield Bros. Ltd. 284
Duesberg-Bosson of America 289
Du Pont de Nemours & Co., Inc., E. I. (Electro-chemicals Dept.) ..... *
Du Pont de Nemours & Co., Inc., E. I. (Finishes Div.) 117
Du Pont de Nemours & Co., Inc., E. I. (Textile Fibers Div.) ..... *
Durant Mfg. Co. 292
Duverre, Inc. ..... *

E
Eastern Engineering Co. 303
Eastman Chemical Products, Inc., Chemicals Div. 43
Eastman Machine Co. 308
Eaton Mfg. Co., Dynamatic Div. 116
Edda International Corp. 94
Electric Regulator Co. 1
Esso Standard, Division of Humble Oil & Refining Co. 25
Exact Weight Scale Co. ..... *
Extremultus, Inc. 39

F
Fabrionics Corp. 98
Fafnir Bearing Co. 100
Faultless Caster Corp. 10
Ferguson Gear Co. ..... *
Fiber Controls Corp. 308
Fife Mfg. Co. 93
Firestone Tire & Rubber Co. *
Fisher Mfg. Co., Inc. 271
Fletcher Industries 14
Food Machinery & Chemical Corp., Chlor-Alkali Div. ..... *
Foster Machine Co. 60
Foxboro Company 228, 229
Franki Assoc., Ernest L. 224
Franklin Process Co. ..... *

G
Gabb Special Products 301
Gardner Denver Co. 314
Gates Rubber Co. 18
Gaylord Container Corp. 101
Geigy Chemical Corp. Geigy Dyestuffs Div. 103
General Dyestuff Corp. 61
General Elec. Co. Apparatus Div. 105, 106, 107 108
General Radio Co. ..... *
Gessner Co., David 264
Goedecke, Inc., Otto 132
Goodrich Chemical Co., B. F. 66
Goodyear Tire & Rubber Co., Inc., Chemical Prod. 5, 53
GPE Controls, Inc. 141, 142
Graton & Knight Co. 260
Gray Company, Inc. 308
Gubelin International Corp. 222
Guider Specialty Co. ..... *
Gulf Oil Corp. ..... *

H
Harshaw Chemical Co. 95
Heinz Hergert 42
Herbert Products, Inc. 303
Hercules Powder Company ..... *
Herr Mfg. Co. 111
Howard Bros. Mfg. Co. ..... *
Hubinger Co. 206
Hunter Machine Co., James 85, 86, 87, 88

I
Ideal Industries, Inc. 218
Ideal Machine Shops ..... *
Industrial Dryer Corp. 270
Industrie Saccardo 276
International Salt Co. 134
Interstate Textile Equipment Co., Inc. 303

J
Jacobs Northern Div., E. H. 34
Jenkins Metals Shops, Inc. 270
Jenkins Sons, M. W. 309
Johnson Bronze Co. 276
Johnson Corp. 297

K
Keever Starch Company 250
Kennett Materials Handling Division, National Vulcanized Fibre Co. 46
Kidde Textile Mchy. Corp. 244, 259
Kirkman & Dixon Co. 311
Klauder Weldon Giles Machine Co. 16
Kluttz Machine & Foundry Co. 36
Koppers Company, Inc., Chemicals & Dyestuffs Div. ..... *

L
Lane & Bros., Inc., W. T. 290
Laurel Soap Mfg. Co. 287
Leesona Corporation 278
Lenkotex Company 122, 276, 287, 297
Lestershire Spool Division National Vulcanized Fibre Co. 6
Lincoln Engineering Co. 68, 69
Link-Belt Co. 41
Livermore Corp., H. F. 17
Livingston & Haven, Inc. 132
Lockwood Greene Engineers Inc. ..... *
Logemann Bros. Co. 295
Loper Co., Ralph E. 301
Ludell Mfg. Co. ..... *
Lunkenheimer Co. ..... *

M
Maguire & Co., Inc., John P. 301
Mann Maschinenfabrik 287
Marlin-Rockwell Corp. 220
Marshall & Williams Corp. 311
Mayer Co. K. G. 297
McBride Co., Inc., Edward J. 20
McDonough Power Equipment, Inc. 301
Meadows Mfg. Co. 130
Merrow Machine Co. 275
Mettler Instrument Corp. 246
Mill Devices Co. Div. A. B. Carter, Inc. 58
Miller Corporation, Harry 11
Milton Machine Works, Inc. 296
Minneapolis-Honeywell Regulator Co., Industrial Div. 92
Minnesota Mining & Mfg. Co. 27
Minnesota Paints, Inc. ..... *
Moisture Register Co. 302
Monforts Maschinenfabrik, A. 285
Monsanto Chemical Co. ..... *
Moretex Chemical Co. 265
Morton Machine Works 52, 310
Morton Salt Co. 121
Mount Hope Machinery Co. 277

N
National Drying Mchy. Co. 112
National Ring Traveler Co. 273
National Starch Prod., Inc. ..... *
National Tube ..... *
National Vulcanized Fibre Co. 6, 46
Nemo Industries, Inc. ..... *
New York & New Jersey Lubricant Co. ..... *
Nihon Spindle Mfg. Co. 300
Nissen Co., John P. 110
Nopco Chemical Co. ..... *
North American Manufacturing Co. 113
Nylon Molded Products Corp. 274

O
Oakite Products, Inc. 289

P
Pabst Brewing Co. ..... *
Parks-Cramer Co. 59
Patterson-Kelley Co., Inc ..... *
Penick & Ford, Ltd., Inc. ..... *
Pennsalt Chemicals Corp. ..... *
Perfecting Service Company *
Perkins & Sons, Inc., B. F. 76
Pneumafil Corp. 70
Polymer Industries, Inc. ..... *
Portland Co., The ..... *
Proctor & Schwartz, Inc. 245
Progressive Engineering, Inc. 57
Provident Life & Accident Insurance Co. 131

R
Radio Corp. of America ..... *
Red-Ray Manufacturing Co., Inc. ..... *
Reiner, Inc., Robert ..... *
Reliance Elec. & Engr. Co. 247
Republic Steel Corp. ..... *
Rhoads & Sons, J. E. 293
Richards-Wilcox Mfg. Co. 305
Rieter & Co., Ltd. J. J. 50
Robbins & Myers, Inc. 102
Robert & Co. Associates, Inc. ..... Front Cover
Roberts Co. 9
Rohm & Haas Company 47
Ross Engineering Corp., J. O. 254
Royce Chemical Co. ..... Fourth Cover
Rudnick Edward S. 21
Ruti Machinery Works, Ltd. 221

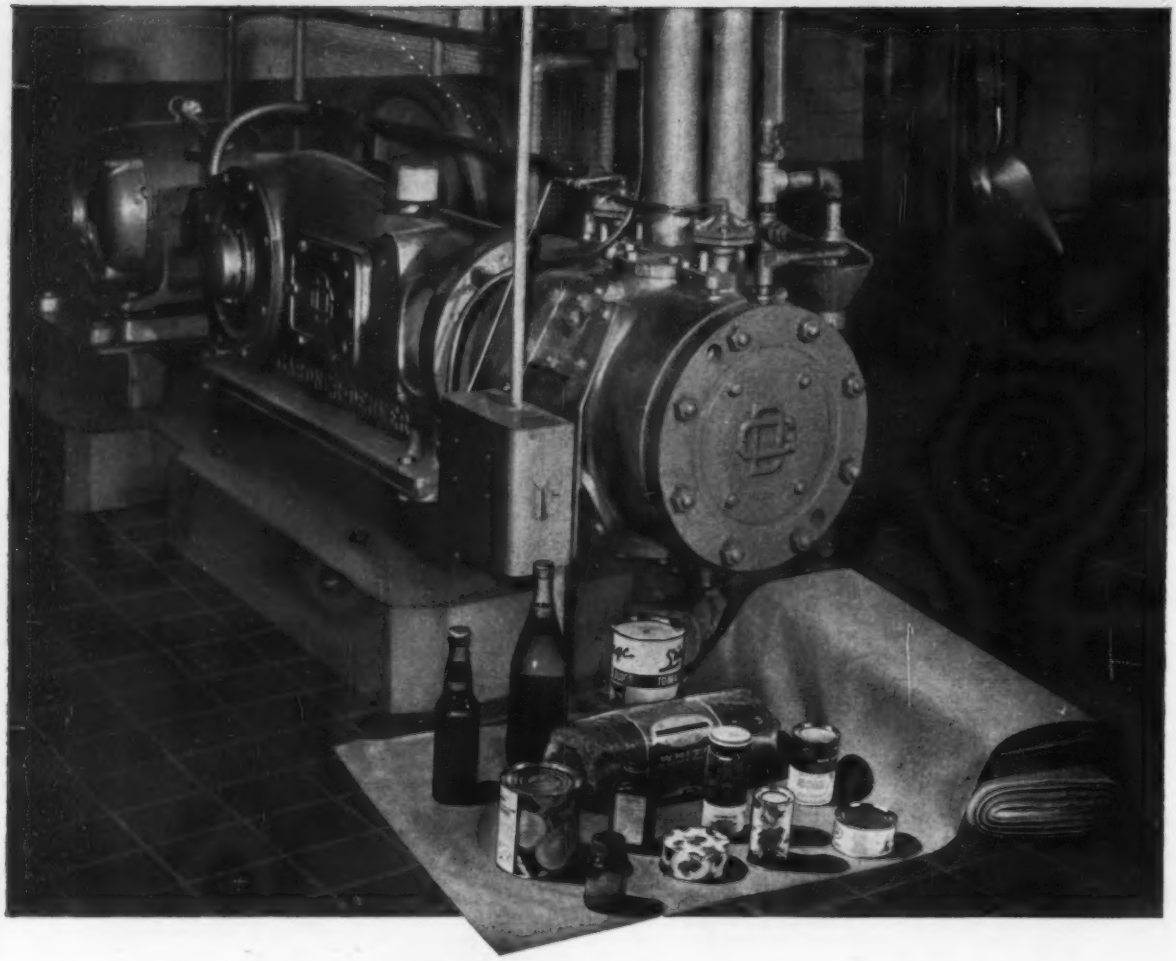
S
SACM 78
Saco-Lowell Shops 248
Sandoz, Inc. 65
Sant' Andrea Novara 224
Sargent's Sons Corp., C. G. 26
Saurer, S. A., Adolph 123
Scheer Tumico Co. 312
Schlumberger & Cie, N. 56
Scott Testers, Inc. 74
Service Recorder Co., The 298
Seydel-Woolley & Co. 120
Shell Chemical Corp. 99
Shell Oil Co. ..... *
Signode Steel Strapping Co. *
Simco Company ..... *
Sims Metal Works 140
Sinclair Refining Co., Inc. 62
Sirrine & Co., J. E. ..... *
SKF Industries, Inc. 252
Smith Textile Apron Co., Inc. 110
Sonoco Products Co. 77
Southern Airways Co. 126
Southern Machine Co., Inc. 55
Southern Shuttles Div. 63
Southern Sizing Co. 299
Southern States Equip. Corp. 12, 13
Southern Textile Works 312
Spaulding Fibre Co., Inc. 256
Spinnerei, Maschinenban 122
Spraying Systems Co. 299
Square D Company 19
Staley Mfg. Co., A. E. 72, 73
Standard Chemical Prod., Inc. 35
Standard Oil Co. (Kentucky) ..... *
Star Paper Tube, Inc. ..... *
Statikel, Inc. 312
Stauffer Chemical Co. ..... *
Steel Heddle Mfg. Co. 63
Steele Canvas Basket Co., Inc. 310
Stover Co., Charles G. 312
Stowe-Woodward, Inc. 79

T
Taylor Instrument Companies 262, 263
Tennant Co., G. H. 24
Tennessee Coal & Iron ..... *
Tennessee Corp. 67, 110
Terrell Mach. Co., Inc. 32, 124
Texaco, Inc. ..... *
Texnova, Spa 40
Textile Banking Co. 135
Textile Machine Works 240
Textile Paper Products, Inc. *
Textile Shield Co. 304
Theiler Corp., H. J. 289
Toledo Scale Company ..... *
Ton-Tex Corp. 303
Torrington Co., The 232
Trumeter Company 272
Trust Company of Georgia 138
Trutzschler & Co. 202
Turbo Machine Co. 236, 237
Tyer Rubber Company ..... *

U
U. S. Steel Corporation. Stainless Steel Division ..... *
Unistel Textile Machine Corp. 22
Universal Winding Co. 278
Uster Corporation 80

V
Veeder-Root, Inc. ..... Third Cover

W
Want Ads 312
Ward Steel Company 311
Warner & Swasey Co. 114
Warwick Chemical Div. 258
Watson & Desmond 266, 267
Watson-Williams Mfg. Co. 309
West Indies Chemical Works, Ltd. ..... *
West Point Fdy. & Mach. Co. 214, 215
Whitehead Die Casting Co. ..... *
Whitin Machine Works 28, 29
Whitinsville Spinning Ring Co. 212
Whitney Chain Co. ..... *
Wicaco Machine Corp. 291
Wildman-Jacquard Co. ..... *
Wonalancet Company 287
Woonsocket Napping Mchy. Co. 292
Woolart Mills, Inc. 42

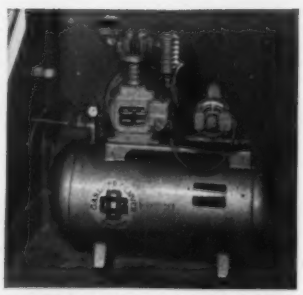


Air helped produce these products . . .

pure, oil-free air from GARDNER-DENVER

This Gardner-Denver Model CRX has enabled many an industry to utilize low-cost compressed air power without penalty to their products. The CRX produces pure, oil-free air without special filters. It provides versatile "go" power to help speed production, cut costs, and keep air-actuated equipment moving.

If a trace of oil in your air line is *too much*, ask your Gardner-Denver Compressor Specialist about the CRX. Sizes range from 100 to 1400 cfm.



For a small, oil-free compressor, the Model CACB is hard to beat. Supplies 4 to 5 cfm . . . discharge pressures 40 to 100 psi.

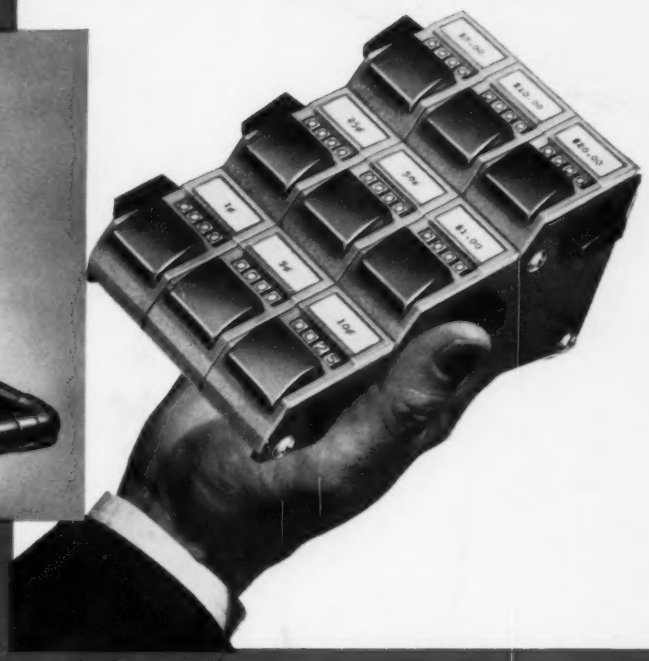
EQUIPMENT TODAY FOR THE CHALLENGE OF TOMORROW

GARDNER-DENVER

Gardner-Denver Company, Quincy, Illinois

Branch Offices: Atlanta, Ga.; Birmingham, Ala.; Knoxville, Tenn.; Washington, D. C.; Teterboro, N. J. (New York Office); Philadelphia, Pa.; Pittsburgh, Pa.; New Orleans, La.; Louisville, Ky.

Count/Pak ...VARY-TALLY



New Products from an Old Friend

Veeder-Root pick counters, loom cut meters, double-wheel measuring counters and hosiery dozens counters are permanent fixtures in textile mills throughout the country. All types of mills depend on Veeder-Root Counters for accurate, up-to-the-minute figures in every process.

But times change — new machines, new production methods, new planning are part of nearly every textile mill. And, keeping pace with this trend is Veeder-Root — with new products designed and engineered to help mills maintain high production figures and, at the same time, reduce operating expenses.

Typical of the many new Veeder-Root products being produced for today's textile industry are the Count/Pak and Vary-Tally.

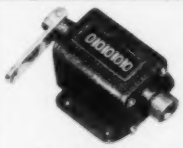
The Count/Pak is a high speed (up to 2500 counts per minute), high accuracy electronic counter, ideal for use on bobbin strippers, for example. It is an economical, dependable, non-contact counter featuring a photoelectric sensing system.

The Veeder-Root Vary-Tally — a compact, rugged, hand-operated counter — is perfect for quality, inventory and production control; for sales and market analysis, payroll preparation, product inspection. You can get Vary-Tally in any of 67 combinations of units.

For complete information, contact your Veeder-Root Counting Engineer or write direct.

See you at American Textile Machinery Exhibition, Atlantic City, May 23 - 27. Booths 296-297

Pick, Hank, Yardage & Knitting Machine Counters



Small Reset Counters

Reset Magnetic Counters

Double-wheel Measuring Counters

Hosiery Dozens Counters

Loom Cut Meters & Predetermining Counters

Veeder-Root

HARTFORD 2, CONNECTICUT

"The Name that Counts"

New York • Chicago • Los Angeles • San Francisco • Seattle
St. Louis • Greenville, S. C. • Altoona, Pa. • Montreal
Offices and Agents in other principal cities

VR 0-19

. . . Comes Out the Same Every Time!

When it's time to shed protection and start fresh . . . time to remove every trace of sizing, for the clear, even dyeing or printing so important to quality, it's time for NEOZYMES* by Royce.

NEOZYMES solubilize all starch, glue or gelatine sizings quickly, safely and completely.

NEOZYMES are carefully tested through every phase of manufacture to insure the purity and uniformity that means dependable performance in every desizing operation.

NEOZYMES are available in liquid or powder form to meet your temperature requirements.

Get all the facts; write us today or phone GEneva 8-5200 to have a trained Royce representative call.

*combined amylolytic, proteolytic and fat-splitting enzymes of animal or bacterial origin.

Royce

ROYCE CHEMICAL CO.

CHEMICAL COMPANY
CARLTON HILL, NEW JERSEY